**The Dissertation Committee for Jennifer Meyer Heckert certifies that this is the approved version of the following dissertation:**

**A Multiple Case Study on Elementary Principals' Instructional Leadership for Students with Learning Disabilities**

**Committee:**

_____

**Sharon Vaughn, Supervisor**

_____

**Diane P. Bryant**

_____

**Martha N. Ovando**

_____

**Herbert Rieth**

_____

**Gregory Roberts**

# A Multiple Case Study on Elementary Principals' Instructional Leadership for Students with Learning Disabilities

**by**

**Jennifer Meyer Heckert, B.A.; M.A.**

**Dissertation**

Presented to the Faculty of the Graduate School of

The University of Texas at Austin in Partial Fulfillment

Of the Requirements

For the Degree of

**Doctor of Philosophy**

**The University of Texas at Austin**

**May 2009**

## Dedication

This work is dedicated to my parents, Lairy J. and S. Corinne Meyer. Thank you for your continuous love, support, patience, and amazing belief in me. Your devotion and encouragement made the completion of this dissertation possible.

**Acknowledgements**

Completing a major accomplishment provides an opportunity to reflect on those people who helped make it possible. My sincere appreciation goes out to my committee members for their willingness to support me through my academic career and while completing this dissertation. In particular, I would like to express my gratitude to Dr. Sharon Vaughn for her encouragement and belief in me. Also, a sincere thank you to my incredibly talented and genuine friends and colleagues for their support.

A thank you is also in order to the participants of this study for their time and willingness to share their insights, experiences, and understanding. I truly enjoyed meeting each and hope this study will serve as a springboard to further promote effective instruction for students with LD on their campuses.

Finally, my appreciation goes out to my loving friend and husband, Scott. Without his support and patience, this dissertation would not be complete. Also, love to my son, Jhett, who came along during the middle of my doctoral program and served as my constant source of inspiration.

**A Multiple Case Study on Elementary Principals' Instructional Leadership for Students with Learning Disabilities**

**Publication No. _____**

**Jennifer Meyer Heckert, PhD.**
**The University of Texas at Austin, 2009**

**Supervisor: Sharon Vaughn**

Using a multiple gating procedure, five elementary principals were identified as special education leaders. This descriptive study uses a multiple-case study design to explore principal's (a) understanding and perceptions of instructional strategies associated with improved outcomes for students with learning disabilities (LD), and (b) their instructional leadership practices utilized to promote educators' instruction of students with LD. Findings reveal that the majority of participants (n = 4) expressed at least a moderate understanding of effective instruction for students with LD, perceived implementation of these practices as necessary (n = 5), but reported mixed perceptions regarding feasibility. As expected, the five participants also described different levels of

utilizing instructional leadership practices to promote educator's instruction of students with LD.

However, the two participants with advanced special education degrees were distinct from the others with respect to their combined high understanding, positive perceptions, and instructional leadership practices utilized to promote educators' instruction of students with LD. Overall propositions indicate: (a) principals in this study who possessed higher understanding of effective instructional practices for students with LD and were interested in improving this understanding, were more apt to engage in instructional leadership practices to promote effective instruction for students with LD, (b) principal's prioritization of developing a collaborative vision and practices among educators to promote effective instruction of students with LD may be beneficial to improving instruction for students with LD, and (c) principal's intentional interaction and support with both general and special educators may lead to higher levels of collaboration among educators as well as more effective instruction for students with LD.

Table of Contents

List of Tables

# Chapter 1

## Introduction

School reforms and recent federal policies, including the No Child Left Behind Act (NCLB, 2001) and the Individuals with Disabilities Education Improvement Act (IDEA) 2004 (Office of Special Education Rehabilitation Services, 2004), have placed emphasis on the instructional leadership role of elementary school principals. For example, NCLB (2001) focuses on high standards and accountability for student learning and mandates that most students are granted access to and master the general education curriculum to the greatest extent possible, participate in standardized assessments, and achieve passing levels of academic performance. Additionally, IDEA (2004) places emphasis on academic goals and accountability for students with disabilities by requiring a student's individualized education plan (IEP) to include provisions for the student to "be involved and progress in the general curriculum" (20 U.S.C S 1414[A] [iii] [II]). The Act also suggests using specially designed curriculum and instruction rather than mere placement to allow access to and progress in the general education curriculum and allow schools to use an alternate method (response to intervention, RTI) for identifying students with a specific learning disability (SLD). Once at-risk students are screened and identified their responsiveness to general and special education instruction is monitored to document progress and may be used as one possible criterion for special education identification (Gresham, 2002; Vaughn, Linan-Thompson, & Hickman, 2003). Consequently, general and special educators are challenged with selecting and implementing effective instructional practices that allow students with disabilities to achieve maximum benefit from the general education curriculum (Crockett, 2004; McLeskey & Waldron, 2002). Moreover, school leaders are faced with the responsibility of facilitating teaching and learning and the collaboration of

teachers to ensure they possess the knowledge and skills necessary to implement effective instructional practices that will allow students with disabilities to achieve their academic goals (Bays & Crockett, 2007; Crockett, 2004; DiPaola & Walther-Thomas, 2003).

Special education instruction has become a major concern for most school leaders, as their responsibilities have increased to guarantee successful learning opportunities for all students, including students who have learning disabilities (LD). In fact, students with LD represent approximately one-half of the 6.6 million students receiving special education services nationally (Donovan & Cross, 2002; President's Commission on Excellence in Special Education, 2002). They are the largest group of students with disabilities in inclusive settings (National Center for Education Statistics, 2005) and make up the highest percentage of students with disabilities participating in state and national assessments (Center on Education Policy, 2007). Recently, students with disabilities, including LD, have made small gains on national and state assessments (National Assessment of Educational Progress, 2007; Center on Education Policy, 2007). However, despite their minimal progress, the average reading score of fourth-grade students with disabilities who participated in the most recent 2007 National Assessment of Educational Progress (NAEP) failed to reach even the *basic* (i.e., partial mastery) level of reading. Additionally, a large number of elementary schools failed to achieve NCLB's 2007 Adequate Yearly Progress (AYP) requirements because of the overall academic performance of the special education subgroup (Center on Education Policy, 2007). To counteract the low levels of academic achievement by elementary students with LD, elementary principals need to have the knowledge and skills to promote effective instructional practices associated with improved outcomes for students with LD. This knowledge and skills may promote more effective

instructional leadership practices with their teachers to ensure students with LD achieve maximum educational benefit from the general curriculum.

### *Effective Instruction for Students with LD*

During the past two decades, research has made significant progress in establishing effective instructional practices for students with LD (Kavale & Forness, 2000; Vaughn, Gersten, & Chard, 2000). More specifically, an evidence base supporting instructional practices that ameliorate actual performance deficits by students with LD in academic domains (e.g., reading, math) has been the focus of researchers (Fletcher, Lyons, Fuchs, & Barnes, 2007). Some of these interventions emphasize academic skills (Swanson, Hoskyn, & Lee, 1999) that are adapted to meet the intensive, specially designed, instructional needs of special education students (Kavale & Forness, 2000). In fact, the term special education is defined in the IDEA (2004) as specially designed instruction in which the content, methodology, or instructional delivery is specifically adapted to address the unique needs that result from a student's disability, and ensure access to the general curriculum so that the student can meet education standards that apply to all students [34 CFR s300.39 (b)(3)]. In other words, instructional practices that are effective for students with LD are thought to include explicit, intensive, systematic, and individualized approaches (Crockett, 2004; Kauffman, 1996; Vaughn et al., 2000; Vaughn & Linan-Thompson, 2003; Williams, 2000).

Furthermore, key principles of instruction associated with improved outcomes for students with LD have been derived from the research (Baker, Gersten, & Lee, 2002; Elbaum, Vaughn, Hughes, & Moody, 1999; Gajria, Jitendra, Sood, & Sacks, 2007; Gersten & Baker, 2001; Gersten, Williams, Fuchs, & Baker, 1998; Mastropieri, Scruggs, Bakken, & Whedon,

1996; Swanson, 1999; Swanson et al., 1999; Vaughn et al., 2000). Swanson, Hoskyn, and Lee (1999) identified instructional components that contributed to positive outcomes across all of the studies in their meta-analysis of effective interventions. Three components strongly influenced student learning: (a) reducing task complexity by scaffolding and sequencing skills, (b) teaching in small, interactive groups of six or fewer students, and (c) directing response questioning in which students were encouraged to think aloud and engage in discussion and self-questioning while reading text. Instructional interventions that included these components across academic domains produced the strongest impact on student learning. This meta-analysis also served as a springboard for subsequent research syntheses (Swanson, 1999; Swanson et al., 1999). Overall, converging evidence from several decades of intervention research support interventions for elementary students with LD that include: (1) explicit, visible instruction; (2) small, interactive groups; (3) scaffolding and sequencing for control of task difficulty; (4) directed response and questioning; (5) guided, corrective feedback; and (6) strategy cues/ procedural facilitators.

### *Students with LD and General and Special Education Instruction*

IDEA (2004) continues to support previous legislation regarding the inclusion of students with disabilities in educational environments with students without disabilities. Consequently, the number of students with LD educated in general education classrooms continues to grow. In fact, the primary responsibility for instruction and educational outcomes for students with LD has been increasingly transferred to general educators (Cook, 2001). Currently, slightly more than one-half of students with LD spend at least 80% of their school days in an inclusive setting (National Center of Education Statistics, 2005). However, placement alone does not guarantee participation and academic progress for these students (Pugach & Warger, 2001).

Indeed, despite the current knowledge and documentation of effective instructional practices for students with LD and the requirement of specially designed practices by current legislation (e.g., IDEA), a growing body of research suggests that when students with LD are included in general education classrooms, teachers are unlikely to alter their traditional, undifferentiated, whole-group instruction. More specifically, general education teachers typically do not implement specially designed instructional strategies aimed at meeting the specific needs of students with LD (Fuchs & Fuchs, 1998; Scott, Vitale, & Masten, 1998). Unfortunately, even teachers identified as being effective inclusion teachers and who are willing to have students with LD in their classrooms are not likely to adapt their instructional practices to meet the needs of individual learners (Fuchs & Fuchs, 1998; Schumm, J. S., & Vaughn, S., Haager, D., McDowell, J., Rothlein, L., & Saumell, L., 1995). Findings also suggest students with LD struggle in general education classrooms that deliver primarily whole class instruction designed for typical learners (Baker & Zigmond, 1995; McIntosh, R., Vaughn, S., Schumm, J. S., Haager, D., & Lee, O. 1993). General educators report reasons for the failure to provide effective, specially designed instruction to students with LD in inclusive settings including: (a) lack of preparation and professional development, (b) limited collaboration with special education personnel, (c) lack of time to plan specially designed instruction, and (d) inadequate administrative support (Scott et al., 1998; Scruggs & Mastropieri, 1996).

Concerns about the effectiveness of pull-out approaches to meet the educational needs of elementary students with LD prompted researchers to examine instructional practices implemented by special educators (Will, 1986). Unfortunately, evidence detailing elementary special educators' resource room reading instruction for students with LD suggests undifferentiated, large group instruction is typically the norm. In other words, special educators

do not consistently implement specially designed instruction to meet the specific needs of students with LD (Moody, Vaughn, Fisher, & Hughes, 2000; Vaughn, Levy, Coleman, & Bos, 2002; Vaughn, Moody, & Schumm, 1998).

Special educators attribute their inability to deliver high-quality, specially designed instruction to unrealistic, inadequate, and unsupportive working conditions (Crockett, 2004). Indeed, a relationship exists between positive principal support (i.e, communication, professional development opportunities, resources) and special educator attrition and retention (Billingsley, 2002a; Billingsley, 2004; Billingsley & Cross, 1991; Boe, Barkanic, & Leow, 1999; Crockett, 2002; Gersten, Keating, Yovanoff, & Harniss, 2001) as well as fewer job role problems, greater job satisfaction, less stress, and more collaborative opportunities with teachers (Billingsley & Cross, 1991; Gersten et al., 2001). A high percentage of special educators who are frustrated from a lack of support often leave teaching (Billingsley, 2002a; Billingsley, 2004; Gersten et al, 2001).

### *Principal Leadership and Special Education*

The effective instruction of students with disabilities has become an important dimension of school improvement, and principals are considered critical to ensuring the delivery of high-quality special education instruction in increasingly inclusive schools (McLaughlin & Nolet, 2004). As a result, researchers have conducted a small number of survey studies examining principals' knowledge and beliefs of inclusion, knowledge of special education law, and comprehensive knowledge of current special education issues and found that overall, many elementary principals are undecided about the benefits of implementing inclusive practices (Barnett & Monda-Amaya, 1998; Guzman, 1996; Praisner, 2003; Villa, Thousand, Meyers, &

Nevin, 1996), have limited knowledge of effective instruction for students with disabilities (Wakeman, Browder, Flowers, & Ahigrim-Delzell, 2006), fair knowledge of comprehensive special education issues, and moderate knowledge of special education legal procedures (Davidson & Algozzine, 2002; Davidson & Gooden, 2001). However, Wakeman et al. (2006) found that middle school principals who reported higher levels of special education knowledge were more involved in special education instructional programs. Furthermore, research indicates the majority of principals feel poorly prepared for jobs as special education leaders (Bateman & Bateman, 2002; Crockett, 2002b; DiPaola & Walther-Thomas, 2003; Monteith, 2000) and report that their administrative preparation programs did not adequately prepare them to support teachers who instruct students with disabilities (DiPaola & Walther-Thomas, 2003; Lasky & Karge, 2006). This evidence suggests school leaders receive limited training regarding fundamental knowledge of special education, including special education instruction, and may be typically unprepared to provide effective special education instructional leadership (Kaye, 2002; Monteith, 2000).

### *Instructional Leadership*

Most school principals are expected to provide instructional knowledge and expertise that addresses all aspects of school leadership including the teaching and learning of all educators and students (Blasé & Blasé, 2004; Hallinger, 2003; Sergiovanni, 1998). Although there are multiple conceptions of instructional leadership, most share converging components that include: (a) developing and sharing a mission and vision that all students can achieve, (b) cultivating collaboration, (c) supporting teachers' instruction, (d) providing professional development, and

(e) monitoring student achievement (Blasé & Blasé, 2004; Glickman, Gordon, & Ross-Gordon, 2001, Leithwood & Jantzi, 2000; Sergiovanni & Starratt, 2007).

Meta-analyses examining direct effects of principal leadership behaviors on student achievement have typically produced small effects (Hallinger & Heck, 1996; Witziers, Bosker, & Kruger, 2003); however, indirect studies of principal leadership behaviors on student achievement (e.g., principals granting educators access to knowledge and resources affects school climate and teachers' instruction) demonstrate more positive and consistent findings and lend evidence to the idea that if principals are to affect student achievement, it is generally through educators' instruction (Hallinger, Bickman, & Davis, 1996; Hallinger & Heck, 1996; Marks & Printy, 2003; Meek, 2000; Sheppard, 1996; Witziers et al., 2003). Direct studies of principal instructional leadership on teacher behaviors have also provided evidence of the positive effects instructional leadership behaviors can have on teacher empowerment and instructional practices (Quinn, 2002; Reitzug, 1994). Furthermore, research has demonstrated teachers' perspectives of principals' positive instructional leadership behaviors and the impact of those behaviors on teachers and their classroom instruction (Blasé & Blasé, 1999). There is also evidence that effective instructional leadership dialogue focuses on classroom instruction, collaboration, and staff development with an emphasis on supporting teachers to construct their own learning and skills to implement more effective instructional practices that will allow all students to meet current achievement standards (Blasé & Blasé, 1999; Blasé & Blasé, 2000; Glickman et al., 2001; Sergiovanni & Staratt, 2007).

Although two decades of instructional leadership research has provided evidence of principals' positive effects on teacher instruction and indirect effects on student achievement, very few studies exist that address instructional leadership for special education (Bays &

Crockett, 2007), in particular, students with LD. Bays and Crockett's (2007) observation and single interview study of rural elementary principals indicated they dispersed responsibility among educators in ways that weakened instructional leadership for special education, were minimally involved with special education instruction, and had limited interactions with teachers about improving the teaching and learning for special education students.

### *Statement of Problem*

Elementary students with LD have made only minimal gains on state and federal assessments (Center on Education Policy, 2007; NAEP, 2007), have generally exhibited below basic reading skills (NAEP, 2007), and have contributed to the failure of numerous elementary schools to meet NCLB's AYP requirements. Compounding this problem are recent federal policies (i.e., IDEA, NCLB) that require academic goals, passing levels of performance for all students, and improving the benefits from the general curriculum for students with disabilities. Fortunately, there is knowledge about how to design instruction to meet the needs of students with disabilities (Swanson et al., 1999; Vaughn et al., 2000). However, both general and special educators report consistently that they often lack the training, knowledge, time, collaboration opportunities, and administrative support (Crockett, 2004; Gersten et al., 2001; Scott et al., 1998; Scruggs & Mastropieri, 1996) to implement specially designed instructional practices that improve the academic outcomes for students with LD and often provide instruction that has less efficacy instead (i.e., undifferentiated, whole-group instruction) (Fuchs & Fuchs, 1998; Moody et al., 2000; Scott et al., 1998; Vaughn et al., 1998; Vaughn et al., 2002).

Previous research suggests that school principals make a difference and have a positive indirect effect on student achievement (Hallinger et al., 1996; Hallinger & Heck, 1998; Marks &

Printy, 2003; Meek, 2000; Sheppard, 1996; Witziers et al., 2003) and a direct effect on teachers' beliefs and instruction (Quinn, 2002; Reitzug, 1994; Sheppard, 1996). In addition, principals' positive instructional leadership behaviors affect teachers' perceptions of effective classroom instruction (Blasé & Blasé, 1999). However, survey studies reported elementary principals receive very limited preparation pertaining to special education, and in general, have limited knowledge of effective instructional practices for students with disabilities (Kaye, 2002; Lasky & Karge, 2006; Monteith, 2000; Wakeman et al., 2006). Furthermore, current instructional leadership models are characterized by the principal's active engagement in inspiring, educating, supporting, and collaborating with teachers to transform the quality of teaching and learning for all students (Glickman et al., 2001, Leithwood & Jantzi, 2000; Sergiovanni & Starratt, 2007) and declare principals as the foundation for instructional leadership at the school level (Sergiovanni, 1998). However, a disconnect may exist between the reported limited training and understanding of elementary principals' regarding instructional practices for special education students, including those with LD, as well as their abilities to engage in instructional leadership practices that promote educators' instructional practices for students with LD.

### *Significance of Study*

Detailed evidence of elementary principals' understanding and perceptions of instructional practices associated with improved outcomes for students with LD is lacking from the literature. Moreover, very little is known about instructional leadership practices utilized by elementary principals who are perceived as effective special education leaders to promote educators' instruction of students with LD. Therefore, this study adds to the literature base regarding elementary principals' understanding and perceptions of instructional practices

associated with improved outcomes for students with LD and their instructional leadership practices utilized to promote educators' instruction of students with LD. The qualitative, multiple-case study design was utilized to purposely select principals based on their perceived and demonstrated effectiveness as special education leaders. Further, this exploratory study may shed light on successful instructional leadership strategies currently utilized to promote educators' instruction of students with LD as well as ideas to improve instructional leadership for students with LD. Data gathered may also provide valuable implications for administrator preparation and in-service training regarding instructional practices associated with improved outcomes for students with LD and effective instructional leadership practices for students with LD. Finally, this knowledge may have a direct impact on the facilitation of academic progress for students with LD.

### *Definition of Terms*

For purposes of this study, the following definitions apply:

Instructional Leadership: A blend of several leadership tasks with the overall purpose of improving instruction, student achievement, and school success through collaborative work among educators (Blasé & Blasé, 2004; Glickman, Gordon, & Ross-Gordon, 2001).

Instructional Practice: Educational practices that are grounded in sound instructional methodology and correspond to the specific academic needs of students to ameliorate academic and behavioral deficits (Fletcher et al., 2007; Kavale & Forness, 2000).

Learning Disability: Deficits in one or more of several domains of academic achievement, including reading, mathematics, and writing. Those affected by a learning

disability typically have adequate intelligence, thus demonstrating unexpected underachievement or atypical development in these areas (Fletcher et al., 2007).

*Specially Designed Instruction*: Content, methodology, or instructional delivery is specifically adapted to address the unique needs of a student to ensure access to the general curriculum (IDEA, 2004).

## *Statement of Purpose*

The purpose of this descriptive study was to use a multiple-case design to explore five elementary principals' understanding and perceptions of instructional practices associated with improved outcomes across academic areas for students with LD and their instructional leadership practices utilized to promote educators' instruction of students with LD.

## *Research Questions*

The following research questions guided this study conducted with elementary principals perceived as effective special education leaders:

1. What instructional practices do they identify as associated with improved academic outcomes for students with LD?
2. How necessary and feasible do they perceive these practices for students with LD?
3. What instructional leadership practices do they utilize to promote educators' instruction of students with learning disabilities?

# Chapter 2

## Literature Review

This chapter provides an overview of the literature as well as the rationale for the hypotheses and the importance of studying elementary principals': (a) understanding and perceptions of instructional practices associated with improved outcomes for students with LD, and (b) instructional leadership practices utilized to promote educators' instruction of students with LD. The literature review is divided into four sections:

1. Instructional practices associated with improved outcomes for students with LD.
2. Students with LD instructed in elementary general and special education classrooms.
3. Principals and special education.
4. Instructional leadership.

The first two sections provide a review of syntheses examining instructional practices associated with improved outcomes for students with LD and an overview of studies that shed light on the quality of instruction elementary students with LD receive in general and special education classrooms. The third section summarizes relevant research on elementary principals and their training and understanding as it relates to special education and special education instruction. Finally, I review instructional leadership conceptions, empirical evidence, professional standards, and its connection to special education instruction.

## *Effective Instruction for Students with LD*

### *Historical Background*

Students with LD are a heterogeneous group with a range of learning challenges, cultures, languages, and variations in academic and behavioral skills. Therefore, educators assume that no general instructional model will be suitable for all students with LD. Nevertheless, since the inception of LD in 1963 (LD; Chalfant, 1998), a significant number of intervention studies have been conducted in hopes of discovering instructional practices that would improve the academic and behavioral achievement of students with LD. Early instruction for students with LD was based on models of neurological and /or processing disorders in which identification and treatment of learning difficulties were linked to the underlying processes that interfered with successful learning. Once a processing deficit was determined, researchers believed they could develop interventions that would remediate student's deficits and in turn capitalize on their strengths (Bateman, 1968; Kirk & Kirk, 1971). However, reliably assessing and identifying process deficits proved questionable, thus making it difficult to create sound interventions that specifically targeted learning problems. Furthermore, the emphasis on remediating process deficits rather than on instructing students in their academic area of need (e.g., math, reading) led to the eventual demise of process identification and treatment models (Chall, 2000; Kavale & Forness, 2000). Additionally, modality-matched and multi-sensory instructional frameworks were used to create interventions to improve outcomes for students with LD (McIntyre & Pickering, 1995). These instructional approaches are based on the assumption that the senses (e.g., visual, audio, kinesthetic-tactile) play a critical role during instruction and should be considered when designing interventions for students with LD. Unfortunately, these early treatment approaches offered no compelling evidence of benefit for

students with LD and were typically associated with little or no effect on positive learning outcomes for students with LD (Hammill & Larsen, 1974, Kavale & Forness, 1987).

Considerable change and progress in creating, implementing, and assessing effective instructional practices for students with LD has taken place during the past 20 years of special education research (Fletcher et al., 2007; Kavale & Forness, 2000; Vaughn et al., 2000). More specifically, researchers and educators are increasingly focused on the evidence base that supports varied educational practices to ameliorate the academic and behavioral deficits associated with LD (Fletcher et al., 2007; Gertsten, 1998). This is due largely to the growing body of evidence demonstrating treatments for students with LD that are grounded in sound instructional methodology (i.e., systematic, explicit instruction) and that emphasize "education" over "special" (i.e., perceptual motor training). These methodologies are far more effective than attempting to cure students with LD by diminishing learning deficits caused by various hypothetical and unobservable constructs (Kavale & Forness, 2000). Furthermore, studies have documented actual performance deficits by students with LD in significant academic domains such as reading comprehension (Taylor & Williams, 1983), expressive writing (Englert & Thomas, 1987), and math (Geary, 1993). Thus, greater emphasis has been placed on effective interventions that correspond to the academic needs of students with LD, further supporting the notion that instructional intervention is the centerpiece of special education research (Crockett, 2004).

As opposed to the "special" instructional practices designed by special educators for implementation in special education classrooms, instructional practices that emphasize academic skills (i.e., self-questioning, corrective feedback, modeling) originated from educational research with typically achieving students (Brophy & Good, 1986; Rosenshine, & Stevens, 1986;

Rosenshine, 1995). These practices were adapted or modified to meet the intensive, specially designed, instructional needs of students served in special education. Williams (2000) described these practices as a "distinctive approach to instruction, involving a slower pace, a more elaborated sequence of steps, extensive practice, and clear feedback" (p. viii). In other words, it is not so much that the instructional practices for students with LD are very different from those found associated with positive effects for students without disabilities, but rather it is the explicit, intensive, urgent, systematic, goal directed and individualized manner in which they are delivered (Kauffman, 1999; Vaughn & Linan-Thompson, 2003). Researchers have demonstrated that instructional practices that are effective for students with LD typically produce even greater outcomes for students without disabilities (Vaughn et al., 2000). These instructional approaches are typically based on behavioral models of teaching and learning, or, increasingly, on models of teaching and learning that developed from cognitive psychology (Gersten, 1998; Harris & Pressley, 1991).

Over the past two decades, numerous studies covering a wide variety of academic domains have demonstrated the effects of specific instructional interventions on the academic and behavioral achievement of students with LD and have influenced both general and special education instruction. During the past 10 years several research syntheses and meta-analyses have examined instructional practices and their effects on students with LD, including elementary students, in an effort to organize and better understand converging findings (Baker et al., 2002; Elbaum, et al., 1999; Gersten & Baker, 2001; Gersten et al., 1998; Mastropieri et al., 1996; Swanson, 1999; Swanson et al., 1999; Vaughn et al., 2000). Research syntheses and meta-analyses are well-recognized methods for providing educators with vital summative information to allow them to make informed decisions regarding educational practices (Cooper, 1998;

Gersten & Vaughn, 2001). A knowledge base has emerged from the results of these well-conducted syntheses, supporting the use of instructional practices predictive of positive outcomes for a range of students with LD. These syntheses and meta-analyses addressed the following academic domains: (a) reading, social skills, mathematics, and problem solving (Swanson et al., 1999); (b) reading comprehension, written expression, grouping practices, higher-order processing, and problem-solving (Vaughn et al., 2000); (c) reading (Swanson, 1999); and, (d) mathematics (Baker et al., 2002). Key findings from the research syntheses and meta-analyses will be summarized and converging instructional practices associated with improved outcomes for students with LD will be identified and briefly reviewed.

*Across Academic Domains*

Swanson, Hoskyn, and Lee (1999) published a thorough intervention research synthesis including 275 studies—group design (n = 180) and single subject design (n = 85) studies from 1963 to 1997 that focused on interventions—in academic (e.g., reading, mathematics), cognitive (e.g., problem solving), and behavioral domains (e.g., social skills) for elementary and adolescent students with LD. This analysis identified a number of instructional practices that consistently produced significant improvement in learning as compared with standard instructional practices. The findings distinguished differences and overlapping similarities between explicit and strategic instructional procedures. Overall, the major findings included: (a) the magnitude of change is greater in some academic domains than others, (b) not all treatments are equally effective, (c) treatment effects are specific to the academic problems being addressed, (d) children with LD were closer in performance to non-disabled children when the treatment condition included strategy instruction, (e) variations in the definitions of LD influence treatment outcomes, and (f) variations in methodology have a significant impact on treatment outcomes.

More specifically, the preliminary analyses attempted to determine which general intervention model would yield the highest effects. Thus, the following were compared:

1. Direct instruction (e.g., repeated feedback, multiple opportunities to respond, drills and probes, rapid pacing, breaking task into steps; for review, see Engelmann & Carnine, 1982; Kameenui, Jitendra, & Darch, 1995; Rosenshine, 1982; Slavin, 1987).
2. Strategy instruction (e.g., systematic explanations of task, thinking aloud, verbal modeling, questioning or demonstrations of steps, systematic reminders to use strategies; for review, see Borkowski & Turner, 1990; Levin, 1986; Pressley & Ghatala, 1990).
3. Direct instruction coupled with strategy instruction.
4. No components of direct or strategy instruction.

The results indicated the combined direct and strategy instruction model yielded significantly higher effect sizes than the other models and is an effective procedure for remediating LD. Additionally, the results suggested that effective instruction for optimal performance (high effect sizes) for students with LD is neither a bottom-up nor a top-down approach in isolation. In other words, lower order and higher order skills interact to influence treatment outcomes. The researchers identified those direct and strategy components that, when combined, yielded the highest values in predicting effect size estimates. This combined model included: (a) sequencing; (b) drill-repetition-practice; (c) segmentation; (d) directed response questioning; (e) control of task difficulty; (f) technology; (g) modeling of problem-solving steps by teacher; (h) small interactive groups; and (i) strategy cueing. Thus, the results demonstrated that effective instructional procedures identified in the general literature (e.g., sequencing,

strategy cues, drill-repetition; for reviews, see Brophy & Good, 1986; Pressley & Harris, 1994; Rosenshine, 1995) are effective for students with LD. In other words, those studies that explicitly included certain instructional components resulted in the greatest gains.

Perhaps more importantly, a second critical set of analysis performed during the meta-analysis attempted to determine which of the 20 instructional components associated with improved outcomes best predicted effect sizes, regardless of the model of instruction used or the content of instruction. Multiple regression analyses were used to isolate the instructional components that predicted outcomes (effect sizes). The first instructional component to enter the regression model was control of task difficulty (i.e., sequencing or scaffolding examples and problems to maintain high levels of student success), followed by small interactive groups of six or fewer students, and directed response/questioning (i.e., self-questioning, metacognitive and procedural facilitators, thinking aloud). These three instructional components explained the common variance in achievement outcomes. The instructional interventions that included these three components across numerous academic domains produced the strongest impact on student learning. These components have the potential to work together to greatly influence student learning and independent functioning, regardless of the academic domain.

Vaughn et al. (2000) summarized critical findings of research syntheses on written expression (Gersten & Baker, 2001), reading comprehension (Gersten, et al. 1998; Mastropieri et al., 1996), grouping practices associated with improved outcomes in reading (Elbaum et al., 1999), and higher-order processing and problem solving (Swanson, 2001). These syntheses will be reviewed, with the exception of Swanson's (2001) article that focuses solely on an adolescent participant sample. Three of these syntheses (Gersten & Baker, 2001; Gersten et al., 1998;

Swanson, 1999) used Swanson and colleagues' (1999) meta-analysis as a springboard for their analyses.

*Written expression.* Gersten and Baker (2001) conducted a meta-analysis of 13 group studies that consisted of 436 children in third through ninth grade and examined expressive writing. Two types of dependent measures for writing instruction were analyzed: (a) measures of student writing, and (b) measures that examined students' understanding of the process of composing text. Across all studies and writing measures, the mean effect size was 0.81 and there was evidence of a positive impact on students' sense of self-efficacy. The quality of the studies was consistently high thus allowing for implications for classroom practice. Best practices in expressive writing instruction for students with LD included: (a) explicit teaching of the writing process including mnemonics or "think sheets" as well as teacher modeling of how to use the strategies by producing several examples, (b) explicit teaching of the conventions or text structures of writing genres, and (c) frequent guided feedback by teachers or peers to students regarding the strengths, weaknesses, and overall quality of their writing.

*Reading comprehension.* Mastropieri et al. (1996) published a meta-analysis of 68 studies between 1976 and 1994 concluding that, overall, the interventions examined improved the reading comprehension abilities of students with LD. Overall, the mean effect size was 0.98 and the largest effects were for treatments that involved self-questioning or cognitive approaches (e.g., self-monitoring, summarizing key points of a paragraph, asking questions that stimulate background knowledge, asking story grammar questions and articulating the major theme of a story) (ES = 1.33).

Gersten et al. (1998) reviewed reading comprehension studies included in syntheses prior to 1997 that utilized a valid experimental or quasi-experimental design to perform a more in-

depth examination of each instructional intervention. Findings indicated that the most effective interventions encouraged students to think aloud about what they are reading and included comprehension monitoring (i.e., students monitor their comprehension and use fix up strategies if they begin to lose understanding) and text structuring (i.e., students create questions about the text they read). The researchers also concluded that students with LD can be taught self-monitoring and self-questioning strategies based on text structures and suggested the importance of explicitly teaching comprehension strategies, allowing students multiple opportunities to practice the strategy, while also providing quality, guided feedback.

Gajria et al. (2007) synthesized 29 studies conducted between 1978 and 2005 that examined expository text comprehension for students with LD, including those in elementary settings. Findings indicated that overall, content enhancement interventions facilitate content area comprehension for students with LD (ES = 1.06). In particular, advanced and/or graphic organizers (ES = 1.12) and mnemonic devices (ES = 1.19) demonstrated strong positive outcomes for increasing content area comprehension. Furthermore, systematic instruction in cognitive strategies (ES = 1.83) also enhanced comprehension of expository text for students with LD. Specifically, generating main ideas or summarizing reading passages was effective (ES = 2.56), as well as text structure training (ES = 2.33), cognitive mapping (ES = 0.96), and questioning (ES = 0.81).

*Grouping practices.* Elbaum et al. (1999) completed a meta-analysis of 20 studies conducted from 1975 to 1995 that examined the relationship between reading outcomes of elementary students with disabilities (e.g., LD and behavior disorders) and grouping formats used for reading instruction (i.e., pairing, small groups, multiple grouping formats). Nineteen studies were identified that contrasted different grouping methods and one study contrasted

different student roles in student pairing. The meta-analysis for overall grouping effects was M = 0.37 and the mean weighted effect size for all types of grouping was 0.43 (pairing ES = .40, small groups ES = 1.61, multiple formats ES = .36). Furthermore, the highest effects for mean weighted effect sizes for subtypes of grouping formats were for cross-age tutoring (ES = .50) and student with disability as cross-age tutor (ES = .86). These findings are consistent with Swanson et al. (1999) who found that teaching in small, interactive groups contributed significantly to the strength of effect for an intervention.

*Reading*

Swanson (1999) explored a reading research synthesis on elementary age students and adolescents with LD in the word recognition and reading comprehension domains based on 92 studies. Four important findings resulted from this meta-analysis:

1. Effect sizes for measures of comprehension were higher when studies included derivatives of both cognitive and strategy instruction (e.g., directed response and questioning), whereas effect sizes were higher for word recognition when studies included direct instruction (e.g., sequencing, segmentation).
2. Effect sizes related to reading comprehension were more susceptible to methodological variation than studies on word recognition.
3. The magnitude of effect sizes for word recognition studies was significantly related to samples defined by cutoff scores (IQ > 85 and reading < 25th percentile). Whereas the magnitude of effect size for reading comprehension studies was sensitive to discrepancies between IQ and reading when compared with a competing definitional criteria.

4. Instructional components related to word segmentation did not enter significantly into a weighted hierarchical regression analysis for predicting effect size estimates of word recognition beyond an instructional core model, whereas small-group interactive instruction and strategy cueing contributed significant variance beyond a core model to effect size estimates of reading comprehension.

Although only two instructional components were found to contribute significantly to predicting effect size for reading comprehension (interactive small-groups, strategy cueing), data also revealed that regardless of the general mode of instruction, a few additional instructional components increased the predictive power of treatment effectiveness. For reading comprehension, the components were as follows: (a) directed response questioning, (b) control of task difficulty, (c) elaboration, (d) modeling of steps by the teacher, (e) interactive small group instruction, and (f) strategy cues. The key instructional components for word recognition included: (a) sequencing, (b) segmentation, and (c) advanced organizers. The importance of these findings is that only a few instructional components from a wide array of activities enhanced outcomes.

*Math*

Baker and colleagues (2002) synthesized research on the effects of interventions to improve mathematics achievement of primary and secondary students considered LD, low achieving in math, or at risk for math difficulties. Meta-analytic techniques were used to calculate mean effect sizes for 15 well-controlled experimental or quasi-experimental group-design studies. Results indicated that different types of interventions were associated with improvement in math achievement levels, especially: (a) providing teachers and students with data on student performance (ES = 0.57); (b) using peers as tutors or instructional guides (ES =

0.66); (c) providing clear, specific feedback to parents on student achievement (ES = 0.42); and (d) using principles of explicit instruction in teaching math concepts and procedures (ES = 0.58).

### *Generalizable Principles of Effective Instruction for Students with LD*

The research syntheses reviewed reveal that after more than 30 years of research to establish an evidence base on instructional practices for students with LD, there are principles to guide instruction. These principles demonstrate effective outcomes for student with LD as well as for higher-achieving students (Vaughn et al., 2000). It may be suggested that educators thoughtfully implement instructional practices with the highest effects to meet the specially designed academic needs of students with LD. Across syntheses, there is strong congruency and overlap of many instructional practices associated with improved outcomes for students with LD. The following instructional components were consistently associated with strong positive effects: (a) explicit and visible instruction, (b) small, interactive groups, (c) scaffolding and sequencing for control of task difficulty, (d) directed response/questioning, (e) guided, corrective feedback, and (f) strategy cues/ procedural facilitators.

*Explicit and visible instruction.* Explicit and visual instruction is a key feature of effective interventions for students with LD (Baker et al., 2002; Elbaum et al., 1999; Gersten et al., 1998; Gersten & Baker, 2001; Mastropieri et al., 1996; Swanson, 1999; Swanson et al., 1999; Vaughn et al., 2000). For example, whether it is the explicit teaching of the writing process with teacher examples (Gersten & Baker, 2001) or the explicit modeling of reading comprehension strategies, including think alouds (Gersten et al., 1998; Mastropieri et al., 1996; Swanson, 1999), students with LD achieve higher levels of success when instruction is overt and the important elements of

what they are learning are identifiable and made evident through examples, visuals, multiple opportunities to practice, and guided, corrective feedback.

*Small, interactive groups.* Small, interactive groups and pairs are associated with improved outcomes for students with LD (Vaughn et al., 2000). The grouping format, the number of students working together during instruction, the interactive nature of the paired or grouped activity, and the role played by the student with LD in the group positively affect outcomes of reading interventions (Elbaum et al., 1999; Gersten et al., 2000). More specifically, effect sizes for students with LD receiving instruction in both small groups and pairs were considerably higher than those for students receiving whole-class instruction. The finding that small group instruction, including working in pairs, was more effective for student with LD, particularly in reading comprehension, was also supported by additional analyses of interventions (Swanson, 1999; Swanson et al., 1999). For example, students with high-incidence disabilities working in small, interactive groups to negotiate meanings of passages outperformed control students whose teachers utilized whole class instruction (Englert & Mariage, 1991). Further, interactive dialogue between teacher and student and student to student appears to be a key component of effective interventions in math, reading, and writing (Baker et al., 2002; Gersten et al., 1998; Mastropieri et al., 1996; Swanson, 1999). In small groups and pairs students are given more opportunities to express what they know and receive immediate feedback from the teacher and other students (Vaughn, Moody, & Schumm, 1998). Also noteworthy, one-to-one instruction was found comparable to small group instruction (3 to 4 students) (Swanson, 1999; Swanson et al., 1999). Thus, interactive, alternative grouping formats (pairs and small groups) are an effective, specially designed component of instruction for students with LD and may be

particularly effective for tailoring instruction to meet the range of learning abilities represented in both general and special education classrooms.

*Scaffolding and sequencing for control of task difficulty.* Critical variables that influence intervention effectiveness are the use of strategies used to enhance task persistence and the moderation of task difficulty (Swanson, 1999; Swanson et al., 1999; Vaughn et al., 2000). Controlling for task difficulty to ensure that students experience success and persist in academic learning activities has been a well-established critical feature of effective instruction for students with LD (Gersten, Carnine, & White, 1984). For example, teachers may provide support or scaffolding to students during learning tasks by reducing or controlling the complexity of the task and then fading support as students gain independence in use of the skill, strategy, or concept. Teachers also control task complexity for students with LD by sequencing and modeling examples and problems from easy to more difficult, teaching in small steps, using explicit step-by-step directions or procedural facilitators, using think alouds, conducting intermittent comprehension checks, providing guided, corrective feedback, and then individualizing the difficulty based on student needs (Bryant, Hartman, & Kim, 2003; Englert & Mariage, 1991; Rosenshine, 1995). Furthermore, students working on tasks that are challenging and meaningful but not beyond their reach may greatly influence their time on task, persistence with tasks, motivation, and ultimately, active academic engagement and enhanced academic outcomes (Vaughn et al., 2000). Therefore, sequencing and scaffolding for control of task difficulty includes appropriate instructional practices designed to meet the unique academic needs of students with LD.

*Directed response and questioning.* Directed response and questioning instructional practices are highly effective at increasing the academic outcomes of students with LD across

academic domains (Elbaum et al., 1999; Gersten and Baker, 2001; Gersten et al., 1998; Mastropieri et al., 1996; Swanson, 1999; Swanson et al., 1999; Vaughn et al., 2000). This instructional component focuses on the teacher directing students to ask questions, or the teacher and students or only students engaging in dialogue to enhance comprehension and meaning. For example, teachers may encourage students to monitor their own understanding and interact with text by asking dialectic or Socratic style questions (Swanson, 1999; Swanson et al., 1999), by explicitly modeling think aloud strategies that demonstrate self-questioning strategies, and/or creating questions about text (Gersten et al., 1998; Mastropieri et al., 1996). These interactions should consistently facilitate the use of cognitive strategies while reading, writing, and solving problems and may be utilized to scaffold and stimulate academic learning for students with LD.

*Guided, corrective feedback.* The research literature provides evidence for the effectiveness of providing students with LD-guided, corrective feedback (Elbaum et al., 1999; Gersten & Baker, 2001; Gersten et al., 1998; Mastropieri et al., 1996; Rosenshine & Stevens, 1986; Swanson, 1999; Swanson et al., 1999). Critical to providing feedback is the knowledge and diagnosis of the cause of a student's error, which makes feedback targeted at guidance and correction possible. Effective corrective feedback may consist of a number of steps, including (a) praising another student's correct response, (b) modeling the correct response, (c) leading/guiding the student as they repeat the correct response, (d) probing/testing to see if the student can make the correct response, and (e) providing multiple opportunities for the student to practice making the correct response. (Carnine, Silbert, & Kamm'enui, 1997). Corrective feedback provided by the teacher or peers has also been included in the description of practice activities, such as peer tutoring, in effective interventions for students with LD (Mathes & Fuchs, 1994). Thus, providing guided, corrective feedback to students with LD is a valuable

instructional practice for supporting and encouraging student accuracy and mastery of academic content.

*Strategy cues and procedural facilitators.* Strategy cues and procedural facilitators influence intervention effectiveness for students with LD (Gersten and Baker, 2001; Gersten et al., 1998; Mastropieri et al., 1996; Swanson, 1999; Swanson et al., 1999; Vaughn et al., 2000). Particularly in the areas of reading comprehension, written expression, and higher-order processing, the use of strategy cues or procedural facilitators help students create an action plan for completing a learning task. For example, educators may instruct students how to use a set of step-by-step strategies or procedures, or a mnemonic to assist them in writing a simple narrative (Saddler, Moran, Graham, & Harris, 2004; Troia, Graham, & Harris, 1999). This may be achieved through explicit modeling of where, when, and how to apply the strategy, the teacher verbalizing the steps, the use of think alouds, and an explanation of the benefits and value of using the strategies. As proficiency with the strategy develops, it is hoped students will take ownership of the strategies and modify them to match the needs of particular situations. Thus, strategy cues and procedural benefits are instructional practices that may be utilized to positively enhance task completion and meet the specially designed academic needs of students with LD to increase their academic performance levels.

### *Students with LD and General Education Instruction*

Designated instruction for students with disabilities, including students with LD, began in 1975 with the passage of P.L. 94-142 (The Education for All Handicapped Children Act of 1975), later referred to as the Individuals with Disabilities Act (IDEA). The number of students qualifying for special education services doubled over the next ten years (Will, 1986), largely

due to the increase in the number of students labeled as learning disabled and the discussion of how and where these students would be educated followed (Hammill, 1993). In 1997, critical amendments were made to IDEA, which brought forth further interest in the least restrictive environment (Crockett & Kauffman, 1998), and mandated in many school districts an increase in the time that students with LD spend in general education classrooms. Currently, students with LD remain in general education classrooms for most or all of the school day (Cook, 2001; NCES, 2005) and need instruction that facilitates academic and social success. Therefore, general educators need the necessary knowledge and skills to implement instructional practices associated with improved outcomes for students with LD as well as effective instructional leadership support to promote their instruction of students with LD.

Students with disabilities require specially designed instruction, or instructional adaptations to succeed in the classroom. Instructional adaptations help students with disabilities achieve academic goals in integrated settings by facilitating student learning. With instructional adaptation, teachers formulate judgments about the success of previous lessons for individual students and, based on those judgments, adjust subsequent teaching strategies or goals (Glaser, 1977). Rather than using identical instructional practices for all students in a classroom, instructional adaptations require teachers to implement alternative teaching actions such as adapting materials, assignments, testing procedures, and grading criteria or varying presentation styles, instructional practices, grouping formats, and feedback techniques to enhance the success of students with disabilities.

However, research suggests general educators have limited knowledge and skills needed to implement specially designed instructional approaches when students appear to struggle, encounter difficulty completing a task, or require more intense instruction (Baker & Zigmond,

1990; Fuchs & Fuchs, 1998; Schumm, Vaughn, Gordon, & Rothlein, 1994; Scruggs & Mastropieri, 1996; Vaughn & Schumm, 1996). Teachers are most likely to implement instructional adaptations that require minimal planning and that can benefit the whole class (i.e., repeating instructions, allowing extra time to complete assignments) and they are least likely to use instructional adaptations for individual students (i.e., individualized instruction; Baker & Zigmond, 1990; Baker & Zigmond, 1995; McIntosh, et al, 1993). Baker and Zigmond (1990) found instructional adaptations by teachers, such as variations in goals, materials, and grouping practices, were not common. Also, in a series of studies, Vaughn and Schumm (1996) discovered that instructional adaptations were generally more desirable than feasible and the most feasible were those that required limited instructional or curricular adaptations. There is also a common finding that most teachers are not willing to plan differentially for students with disabilities. This may be due in part to teachers' perceptions that students with LD should be able to perform as other students if they are to be placed in a general education classroom (Vaughn & Schumm, 1994) or that differentiating it is not "fair" to the other students in the classroom (Schumm et al., 1995).

One synthesis of 21 studies conducted to examine general educator's perceptions and use of instructional adaptations for students with disabilities in general education classes (Scott, Vitale, & Masten, 1998) concluded that the majority of studies investigating general educators' perceptions and/or the use of instructional adaptations suggest general educators make few, if any, instructional adaptations for students with disabilities in the general education environment. In fact, they found that undifferentiated, large-group teaching is the norm in general education classrooms. Furthermore, the reasons given for the failure to provide specially designed instruction and adaptations to students with disabilities in inclusive settings include lack of

training and skill, limited administrative support implementing instructional adaptations, as well asand time constraints and philosophical opposition.

The previous synthesis (Scott et al., 1998) included studies spanning from 1986 to 1996, and focused on general educator's perceptions and use of instructional adaptations for students with disabilities in general education classes. I completed an additional synthesis by expanding the previous synthesis (Scott et al., 1998) to studies published through December, 2006. The purpose of the extended synthesis was to examine the recent nature of general educators' perceptions and use of instructional adaptations for students with disabilities in general education classrooms in light of a recently implemented educational policy (e.g., NCLB, 2001; IDEA 2004). Specifically, this synthesis addressed the following research questions: (a) What instructional adaptations do teachers currently view as being high/low on desirability/feasibility, (b) What instructional adaptations are teachers currently implementing? (c) What are the current factors affecting instructional adaptation implementation?

I conducted a comprehensive search of the literature was conducted using a three-step process suggested by Cooper (1998). First, an electronic search of ERIC, PsycINFO, and Education Full Text was conducted to locate studies published between 1996 and 2006. Second, a hand search of seven major, peer-reviewed journals published between 2000 and 2006 was conducted. Third, the citation search phase involved searching reference lists of identified studies which fit the criteria for inclusion in this synthesis.

Studies were selected if they met the following criteria:

1. Studies included a focus on general education teachers' perceptions or use of instructional adaptations for students with disabilities.

2. Measures used to obtain teachers' perceptions or use of instructional adaptations were survey, observation, or interview.
3. Participants were K-12 general education teachers. When personnel other than general education teachers were included in the study (e.g. special education teachers), data pertaining to general education teachers must be reported separately.
4. When data collected included more than instructional adaptations alone (e.g., teachers' perceptions of mainstreaming) data pertaining to instructional adaptations must be reported separately.
5. Studies to determine the effectiveness of instructional adaptation interventions proposed by researchers were excluded.

A total of eight studies were located through this procedure for inclusion in this synthesis (DeBettencourt, 1999; DeSimone & Parmar, 2006; Fletcher, Bos, & Johnson, 1999; Leyser & Tappendorf, 2001; Maccini & Gagnon, 2006; Minke, Bear, Deemer, & Griffin, 1996; van Hover & Yeagar, 2003; Vaughn, Reiss, Rothlein, & Hughes, 1999). Findings were consistent with the previous synthesis (Scott et al., 1998) and revealed that teachers perceived the majority of instructional adaptations to be highly desirable and somewhat feasible, but reported being only fairly confident, prepared, and supported to implement instructional adaptations in their classroom. Therefore, whole group, undifferentiated instruction was most frequently used in their classrooms, regardless of the setting. The results from this synthesis suggest an important gap exists between how teachers' perceive instructional adaptations for students with disabilities and the instruction implemented. This finding is consistent with additional prior research (e.g., Schumm & Vaughn, 1991; Ysseldyke, Thurlow, Wotruba, & Nania, 1990; Zigmond & Baker,

1994) and suggests instructional adaptation practices have changed very little, if any, over the past 20 years.

Overall, findings suggest general educators do not consistently implement specially designed instructional practices that facilitate the academic and behavioral achievement of student with LD in general education classrooms as needed. As mentioned, there are several reasons why teachers may struggle to meet the needs of students with LD in general education classrooms. Broadly speaking, the themes repeated include teachers' need for: (a) time to collaborate and plan for instruction for students with disabilities, (b) training in instructional practices that are effective for students with disabilities, and (c) additional support from site administration (e.g., Scott et al., 1998; Scruggs & Mastropieri, 1996) to address the academic and behavioral needs of students with disabilities. Although these needs are well-documented in the literature, descriptions of elementary principals' understanding and perceptions of effective instructional practices for students with LD is absent. This knowledge may provide the foundation for elementary principals to provide effective instructional support to general educators. The evidence base also lacks sufficient data regarding the instructional leadership strategies utilized by elementary principals to promote general educator's understanding and implementation of effective instructional practices for students with LD.

### *Students with LD and Special Education Instruction*

Approximately 80-90 % of students identified with LD have reading problems (Snow, Burns, & Griffin, 1998) and if they are not included in the general education classroom for the entire school day, they typically receive special education instruction in the resource room. Not surprisingly, most examinations of special educators' instruction of elementary students with LD

have taken place in the resource room and focus on reading instruction. Researchers and recent legislation (i.e., IDEA) suggest that special education is instruction that is more intensive, more highly structured and explicit, more carefully monitored, and specially designed to meet the individual academic and behavioral needs of students with special needs (Kauffman, 1996). Therefore, special educators need the necessary knowledge and skills to implement specially designed instructional practices associated with improved outcomes for students with LD as well as effective instructional leadership support to facilitate implementation. However, an examination of the knowledge base detailing special educators' reading instruction for elementary students with LD in the resource room suggests special educators may not have the critical knowledge and skills or support to implement effective, specially designed instruction for students with LD.

The effectiveness of special education resource room instruction as an intervention for students with high-incidence disabilities, such as LD, in reading has been studied extensively (e.g., Bentum & Aaron, 2003; Gelzheiser & Meyers, 1991; Haynes & Jenkins, 1986; McGill-Franzen & Allington, 1990; Moody et al., 2000; Vaughn et al., 1998; Vaughn et al., 2002). Evidence from recent analyses of reading instruction in resource room settings has shown that many elementary students with high-incidence disabilities, including students with LD, have received reading instruction that is indistinguishable from the instruction of typically achieving students in general education classrooms. In other words, research suggests special educators' instruction for students with LD is typically undifferentiated, small group work is not the norm, and specially designed practices are not consistently implemented.

For example, in a synthesis of 16 observational studies of reading instruction in elementary resource rooms, Vaughn et al. (2002) found that undifferentiated (i.e., same tasks,

materials, curriculum for all students rather than instruction based on student needs) whole group (i.e., all students instructed in the same task at the same time) instruction similar to general education classrooms prevailed. Similarly, as a result of an observational and interview study of 14 special education teachers over the course of one year, Vaughn et al. (1998) discovered that teachers primarily provided whole group instruction to slightly large groups of students (5 to 19), and little differentiated instruction or few materials were provided despite the wide range (3rd- to 5th-grade levels) of reading abilities represented. Furthermore, students spent the majority of their instructional time completing undifferentiated worksheets at their seats (Vaughn et al., 1998; Vaughn et al., 2000). However, a follow-up observational and interview study (Moody et al., 2000) examining the instructional practices of a set of the same participants from the previous study (Vaughn et al., 1998) revealed that whole class instruction was still the dominant grouping format, although some of the teachers used small groups and differentiated materials and instruction to match the learning levels of students.

Overall, this body of evidence suggests elementary students with LD who were instructed by special educators received instructional quality that was equal to their typically achieving peers rather than more intensified "specially designed instruction" intended to close the gap between their reading achievement level and their grade level as specified by the Individuals with Disabilities Education Act (20 U.S. C. 1400 et seg.). This is problematic considering converging research syntheses have recognized key instructional practices (i.e., interactive small groups, control of task difficulty, procedural facilitators) associated with improved outcomes across academic domains for students with LD (Swanson, 1999; Swanson et al., 1999; Vaughn et al., 2000).

Special educators report their inability to deliver high-quality, specially designed instruction to unrealistic, inadequate, and unsupportive working conditions (Crockett, 2004). Indeed, researchers have demonstrated that there is evidence of a link between principal support and special educator attrition and retention. As many as half of all new special educators leave the field within the first three years or move to jobs in general education as a result of this and other factors (Billingsley, 2002a; Billingsley, 2004; Billingsley & Cross, 1991; Crockett, 2002; Gersten et al., 2001). However, special educators who stay in their positions are four times more likely to strongly perceive principal's behavior as supportive and encouraging (Boe, Barkanic, & Leow, 1999). Greater building-level administrative support are associated with fewer job role problems, more opportunities for professional growth and collaboration, greater job satisfaction and commitment, and less stress among special educators (Billingsley & Cross, 1991; Gersten et al., 2001).

Although there is evidence of a link between positive principal support and special educator retention and attrition, any data documenting elementary principals' understanding and perceptions of effective instructional strategies for students with LD is absent. Furthermore, there is scant information regarding instructional leadership practices utilized by elementary principals to promote special educators' instruction of students with LD.

### *Principal Leadership and Special Education*

Special education presents one of the major challenges facing school leaders in this era of comprehensive school reform (DiPaola & Walther-Thomas, 2003). This may be a consequence of the increased number of students with disabilities educated in general education classrooms and federal high-stakes mandates that hold students and educators accountable for all students to

achieve higher academic performance levels. For example, IDEA (2004) specifies that students with disabilities must have access to the general education curriculum and participate in assessments. In addition, NCLB (2002) created additional provisions to ensure that no children—especially those with the greatest learning needs—are neglected in standards-driven learning environments. In other words, progress must be monitored for all students and scores must be disaggregated to indicate how well students with disabilities, as well as other targeted groups, perform. If schools do not meet acceptable levels of academic passing rates for all students, they face penalties and are labeled unacceptable. Thus, as academic expectations and pressures have continued to rise, principal leadership has become increasingly more important (DiPaola & Walther-Thomas, 2003; National Association of Elementary Principals [NAESP], 2001).

As a result, researchers are examining the influence of the principal's role in providing students with disabilities an appropriate public education. Principals' beliefs and attitudes towards special education are key factors influencing their behaviors towards students with disabilities (Praisner, 2003). Principals hold the role of symbolic leader (Sage & Burello, 1994) and moral authority (Sergiovanni, 1998), and their actions or inactions may condone or condemn the attitudes and behaviors of staff members (Guzman, 1996). For example, Villa et al. (1996) found that administrative leadership was the most powerful predictor of positive teacher attitudes toward instructing students with disabilities. Thus, principals' leadership is critical to shifts in attitude, behavior, and instructional practices. In fact, according to Fullan (2001), without the guidance and support of principals, efforts to alter classroom practices have a greater likelihood of failure. Therefore, to ensure the academic and behavioral success of students with LD, it is critical that elementary principals have the necessary knowledge and skills to exhibit leadership practices that advance the acceptance, instruction, and overall progress and success of all

students, including those with LD, to meet the academic expectations required by recent educational legislation (i.e., IDEA, 2004; NCLB, 2001).

*Principals' Knowledge of Special Education*

The majority of studies examining principals' knowledge of special education and its current issues have utilized surveys to focus on one-dimensional aspects of special education such as principals' knowledge of inclusion (Barnett & Monda-Amaya, 1998; Guzman, 1996; Praisner, 2003; Villa et al., 1996) and education law (Davidson & Algozzine, 2002; Davidson & Gooden, 2001). Most relevant to this discussion is Praisner's (2003) survey of 408 elementary principals to investigate relationships regarding attitudes toward instructing students with disabilities, variables such as training and experiences, and placement perceptions. Results indicated that about one in five principals had positive attitudes toward inclusion while the majority were uncertain about the implementation of inclusive practices. Results emphasized the need to provide principals with more specific special education training, including effective instruction for students with disabilities.

One recent study differed from the one-dimensional studies above and investigated principals' comprehensive knowledge of special education. Wakeman et al. (2006) completed a survey research focusing on 362 middle school principals' comprehensive knowledge and beliefs of special education. Overall, the principals reported being fairly knowledgeable about special education and overwhelmingly agreed that all students are the responsibility of the principal and should have access to the general education curriculum. However, one-third reported having limited knowledge or ability to train teachers regarding best instructional practices for students with disabilities to access the general education curriculum, including differentiated instruction and curriculum based measurement. Additional findings supported the proposition that principals

that indicated higher levels of special education knowledge were more involved in aspects of special education instructional programs. For example, principals who reported more special education knowledge reported higher levels of:

1. Critical reflection/analysis of observations of special education instruction.
2. Regularly meeting with teachers who taught special education students.
3. Provision of resources for effective special education instructional practices.
4. Participation of special education program decisions.
5. Willingness to take risks related to special education.

Although these findings lack in-depth details regarding principals' level of understanding of instructional practices for students with disabilities, they offer promising evidence that there may be a link between principals' knowledge of special education and a higher level of interest and involvement in special education instruction.

As principals often have limited knowledge about special education and specially designed instruction (Crockett, 2002), they often request assistance from special educators regarding instruction for students with disabilities (Bays & Crockett, 2007; Cook, Semmel, & Gerber, 1999; Lasky & Karge, 2006). In fact, Bays and Crockett (2007) revealed elementary principals frequently rely on special educators as "the experts in instructional matters" (p. 156). However, this warrants caution as some special educators report they are not effectively trained, do not know how to collect progress monitoring data, do not collaborate with general educators (Cook, Semmel, & Gerber, 1999), and do not typically seek out or use effective, research-based practices (Boardman, A. G., Arguelles, M. E., Vaughn, S., Hughes, M. T., & Klingner, J., 2005). Additionally, the knowledge base related to special educators' reading instruction of students

with LD in elementary resource rooms suggests special educators do not typically implement instruction designed to meet the individualized needs of students with LD.

Not surprisingly, studies examining principals' knowledge of special education have found most principals feel poorly prepared for jobs as special education leaders (Bateman & Bateman, 2001; Crockett, 2002; DiPaola & Whalter-Thomas, 2003; Lasky & Karge, 2006; Monteith, 2000) and even identified help and information about implementing successful special education services as the greatest need to fulfill their role as principal (DiPaola & Tschannen-Moran, 2003). In a recent survey study of 205 elementary and secondary principals, Lasky and Karge (2006) found that 78% of participants did not believe their administrative preparation programs adequately prepared them to support teachers who teach children with disabilities. Monteith (2000) surveyed 120 administrators and found that although 75% had no formal training related to special education, 90% indicated that formal special education training was needed to be an effective leader. Furthermore, Kaye (2002) found that many states do not require any course work in special education to earn a principal's license. This data is alarming and suggests many school leaders receive little, if any, formal pre-service or in-service training regarding knowledge of special education, including instruction for special education students, and are typically unprepared to provide effective special education leadership (Kaye, 2002; Monteith, 2000). This warrants concern, considering principals who understand effective instructional practices and recognize the instructional demands that all teachers face may be able to provide more appropriate support for educators and increase the likelihood of student success (Gersten et al., 2001).

In general, the few studies in the literature researching elementary principals' preparation, training and/or knowledge regarding special education demonstrate that elementary

principals' lack knowledge and training related to special education instruction. McLaughlin (1991) suggested that practices would change once individuals had the knowledge, skills, and experience necessary for implementation. However, this may not be happening because elementary principals may not be receiving appropriate training.

*Hypothesis.* Regarding elementary principals' understanding and perceptions of effective instructional strategies for students with LD, one hypothesis behind this study is that elementary principals' level of understanding and degree to which they perceive these practices positively may be commensurate with the amount of special education related training each has completed.

## *Instructional Leadership*

The concept of instructional leadership has grown from the research on effective schools, school change implementation, and the shift that called for principal leadership focused on leading the improvement of instruction and student achievement (Beck & Murphy, 1992; Bossert, Dwyer, Rowan, & Lee, 1982; Edmonds, 1979; Hallinger, 2003; Hallinger & Murphy, 1987). A number of interchangeable terms exist for its concept, such as supervision, instructional, educational, or principal leadership (Blasé & Blasé, 2004). Its overall purpose is to improve instruction, student achievement, and school success through democratic, collaborative work among educators to enhance student achievement, teacher development, and educational equality (Glickman, Gordon, & Ross-Gordon, 2001). Instructional leadership is often defined as a blend of several leadership tasks such as supporting classroom instruction, staff development, and collaborative efforts. However, multiple conceptions of instructional leadership have emerged.

Current literature of instructional leadership falls into four broad categories. First, prescriptive models describe instructional leadership as observable tasks and behaviors and include defining the school mission, managing the instructional program, and promoting a positive school climate (Hallinger & Murphy, 1987); as a reciprocal, developmental, and transformational activity based on equity and growth (Leithwood & Jantzi, 2000); and ultimately, the collective, distributive, motivational, and moral sharing of visions and values by all stakeholders toward improving teaching and learning (Sergiovanni, 1995). Second, studies of direct and indirect effects on student achievement include Hallinger's and Heck's (1996) review of 40 studies investigating the principal's impact on student achievement and Witzier and colleagues (2003) meta-analysis of the direct effects of principals' leadership on student achievement. Third, studies of direct effects of principal behavior on teachers and classroom instruction include Sheppard's (1996) research demonstrating that certain principal behaviors affect teacher commitment, involvement, and innovation. Finally, studies of instructional leadership include exploratory studies, such as teachers' perceptions of principals' instructional leadership behaviors that positively affect teachers' classroom instruction (Blasé & Blasé, 1999; Blasé & Blasé, 2000).

*Conceptions of Instructional Leadership*

While there are multiple conceptions of instructional leadership, Hallinger and Murphy's model (Hallinger & Murphy, 1987) offers a widely used construct of instructional leadership (Hallinger, 2003; Leithwood, Jantzi, & Steinbach, 1999). This concept of instructional leadership refers to the principal's actions that drive others to perform tasks so that students can achieve. These actions occur in three domains: defining school mission, managing the instructional program, and promoting a positive school climate. The first of these domains, defining the

school mission, is comprised of two components—framing and articulating the school's goals. The second domain, management of the instructional program, describes the coordinating and shaping of the school's instructional program. The final domain, promoting a positive school climate, includes protecting instructional time, promoting professional development, maintaining high visibility, providing incentives for teachers, and providing incentives for learning.

Other constructs address criticism that some models (Hallinger & Murphy, 1987) are too hierarchical and depend too heavily on the individual capacity of a principal's leadership to affect change. As Lambert (2002) suggests,

> The days of the lone instructional leader are over. We no longer believe that one administrator can serve as the instructional leader for the entire school without the substantial participation of other educators (p. 37).

In response to such concerns, transformational leadership has emerged as a reflection of a growing understanding of the reciprocal relationship between principals and teachers in the improvement of teaching and learning. Leithwood and Jantzi (2000) argue that their model of transformational leadership better reflects strategies needed by principals to foster teacher commitment to innovation and growth, including six factors:

1. Building school vision and goals.
2. Providing intellectual stimulation.
3. Offering individualized support.
4. Symbolizing good professional practice and values.
5. Demonstrating high performance expectations.
6. Developing structures to foster participation by all school stakeholders in school decisions.

The dimensions of transformational leadership require principals to focus on improving instructional programs, teaching and learning, and student outcomes by creating a motivating environment in which all educators work collectively to reach the academic and behavioral needs of all students.

Another desired result and conception of instructional leadership is one that ultimately hopes to convert followers into leaders and leaders into moral agents (Sergiovanni, 1995). Moral leadership evolves through distributed instructional leadership and requires a shared vision, a sense of reciprocal purpose, and shared values to inspire higher levels of commitment and involvement by all stakeholders. Sergiovanni & Starratt (2007) suggested that moral activity of instructional leaders must be, "situated in relationships, relationships with teachers, most importantly, and with students, and with the intrinsically moral activity of learning" (p. 66). Furthermore, they suggest that, "in acknowledging and supporting the moral character of learning itself, leadership work finds its most consistent grounding" (p. 66). Critical to this concept is the *moral ideal of teaching* and instructional leaders supporting teacher learning and, if warranted, change and commitment to practice in an exemplary way.

*Effects of Instructional Leadership*

This section begins with a review of a comprehensive synthesis and a meta-analysis examining principals' direct effects and indirect effects on student achievement. This is followed by a relevant summary of more recent studies that include elementary students and focus on instructional leadership and relationships between student outcomes and teacher outcomes, as well as teachers' perceptions of principals' instructional leadership behaviors and their impact on classroom instruction.

Hallinger and Heck (1996) reviewed 40 studies published between 1980 and 1995 that examined the relationship between principal leadership and student achievement with much skepticism due to conceptual and methodological flaws found in the studies. Nonetheless, the researchers determined three significant conceptualizations of the effects of principals' leadership on student achievement: direct effects on student achievement, mediated or indirect effects on student achievement, and reciprocal effects on student achievement.

The direct effects model suggests leadership practices can have effects on school outcomes. This approach assumes that effects can be measured reliably apart from other related variables. However, serious flaws exist in the methodology of most of the studies examining direct effects of principal leadership on student learning. What's more, studies examining the direct-effects of principal leadership were unable to produce consistent evidence of leadership effects on student outcomes. As a result, Hallinger and Heck (1996) concluded that direct-effects models had limited utility for investigating the effects of principal leadership.

The mediated or indirect effects model hypothesizes that leaders achieve their effect on school outcomes through indirect paths. Principal leadership practices contribute to outcomes desired by schools, but the contributions are usually mediated by other people, events, and organizational factors, such as teacher commitment, instructional practices, or school culture. To cope with the more complex relationships of mediated-effects models, researchers employed more sophisticated analytic methods than were used in direct-effects studies. Noting a greater consistency in findings of principal leadership effects which emerged when more complex methods and analyses were conducted, the researchers concluded that a pattern of positive indirect effects of principal leadership on student achievement were found. More specifically,

studies in which indirect effect models are used showed a greater impact of principal leadership on student performance than did studies employing direct effects models.

Finally, researchers who utilized the reciprocal-effects model in their studies proposed that relationships between the principal and features of the school and its environment are interactive. This framework implies principals adapt their thinking and behavior overtime to the organization in which they work. As principals engage with teachers, respond to changing patterns in student learning, and to staff turnover, principals initiate changes in the school curriculum or instructional practices. The feedback the principal receives following these changes causes reciprocal changes in leadership practices. Noting the small amount of studies utilizing this complex framework that would require very sophisticated methodology, the researchers did not extend conclusions and called for more longitudinal data for this type of model.

Witziers et al. (2003) completed a meta-analysis of 37 studies from 1986 to 1996 examining to what extent principals directly affect student outcomes. The small positive effects (ES = .02) found confirmed research findings on the limitations of the direct effects approach to linking principal leadership behaviors with student achievement. When specific instructional leadership variables were examined, one demonstrated a moderate positive relationship with student outcomes, defining and communicating the school's mission (ES = 1.9).

*Student Achievement Outcomes.* Hallinger et al. (1996) studied the influence of principal instructional leadership on student achievement. Drawing on survey data from 1300 teachers and 87 principals in 87 elementary schools, their study examined the influence of principal instructional leadership on student learning, as mediated by school contextual variables and measured by reading achievement. They found no direct effects of principal instructional

leadership on student test scores. However, they discovered that leadership did have a positive indirect effect on the school-learning climate.

Meek (2000) conducted a survey study from a random sample of 300 public elementary schools using Hallinger's Principal Instructional Management Rating Scale (PIMRS) and a state-level assessment to study the relationship between instructional leadership and student achievement. Multivariate analyses were conducted and the findings suggested a positive relationship between instructional leadership practices and student test outcomes: framing and communicating school goals, coordinating instruction, monitoring student progress, and maintaining high visibility.

Marks and Printy's (2003) study proposed an integrated model of active and transformational instructional leadership, examining the relationship between principal behaviors, pedagogical quality and student performance. Active collaboration around instructional matters to enhance the quality of teaching and student performance was examined. Using hierarchical modeling and drawing on student work as well as survey, interview, and observation data from teachers and principals from 24 schools (eight elementary), they found higher levels of principal leadership behaviors with an integrated model. Furthermore, the integrated model positively influenced overall school performance, as measured by the quality of instruction and student achievement.

*Teacher outcomes.* Reitzug (1994) used a case study design to examine the relationship between an effective elementary principal's instructional leadership and teacher empowerment. The researcher hypothesized that greater teacher empowerment would lay a foundation for instructional improvement. Findings indicated principal behavior consisting of providing staff development, asking questions, encouraging risk taking, requiring justification of practices, and

supervision-by-wandering-around led to greater levels of teacher empowerment. The researcher concluded that principals' empowering behavior involves facilitating teachers' examination of which instructional practices are more appropriate for better serving the needs of students. Furthermore, to make it possible for teachers to implement appropriate practices, principals must acquiesce resources and have a general knowledge of a variety of effective instructional delivery techniques to facilitate teachers' examination of their practices.

Sheppard (1996) synthesized research on instructional leadership behaviors, and found a broad perspective of instructional leadership defined as interactions between leaders and followers wherein the followers' beliefs and perceptions are viewed as important. Sheppard then confirmed a positive and strong relationship between effective instructional leadership behaviors exhibited by elementary and middle school principals and teacher commitment, professional involvement, and innovativeness, suggesting that select instructional leadership behaviors, promoting professional development and maintaining high visibility can be used to support teachers' instructional development.

Quinn (2002) examined the relationship between principal instructional leadership behaviors and teacher instructional practice descriptors. Eight of the 24 schools included in the study were elementary schools. Teachers were surveyed on the principal's instructional leadership abilities and student and teacher engagement data were collected. Instructional leadership dimensions were found to correlate highly with instructional practices. The researcher discovered that higher levels of active teaching and learning occurred when the principal served as a collaborative instructional resource ($p < 0.01$).

Blasé and Blasé (1999) used an open-ended questionnaire, *The Inventory of Strategies Used by Principals to Influence Classroom Teaching* (ISUPICT) to investigate the instructional

leadership characteristics of principals that either positively or adversely influence classroom teaching. Elementary (n = 380) and secondary (n = 429) teachers' perceptions of principal instructional leadership characteristics that enhanced their classroom instruction and what impact those characteristics had on them were studied. Analyses of the data generated two dominant themes of principal instructional leadership behaviors that teachers perceived to positively affect their classroom instruction. These findings were then used to construct the Reflection – Growth model of instructional leadership.

Theme one, *Talking with Teachers to Promote Reflection*, consists of principal instructional leadership behaviors to promote reflection. According to the data, talking with teachers inside and outside of instructional conferences was the cornerstone of effective instructional leadership. Specifically, dialogue that encouraged teachers to become aware of and critically reflect on their learning and instructional practice was particularly effective. Theme two, *Promoting Professional Growth*, focuses on promoting teachers' professional growth with respect to teaching methods and collegial interaction about teaching and learning. Data found that principals who were effective instructional leaders provided formal staff development opportunities to address emergent instructional needs and became learners themselves by participating, recognizing collaborative networks among educators, and encouraging teachers to redesign instructional programs to include diverse and flexible approaches to meet students' needs.

*Instructional Leadership Professional Standards*

Professional education organizations have created standards for school leadership practice to focus on student learning. For example, 35 states have adopted the Interstate School Leaders Licensure Consortium's (ISLLC) "Standards for School Leaders" (1996). These

standards have a specific focus on high expectations of success for all students, an emphasis on teaching and learning as the primary grounding for school leadership, and an importance placed on beliefs and values in providing direction for school leaders. More pertinent to this discussion, The National Association of Elementary School Principals (NAESP) created six standards that outline critical competencies expected by instructional leaders. *Leading Learning Communities: NAESP Standards for What Principals Should Know and Be Able to Do* (2001) focuses on what students, educators, and principals should know and be able to do in for all students to achieve their academic and behavioral objectives. NAESP believes principals are the primary instructional leaders in the schools and encourages them to utilize the document to inform their instructional leadership decisions. As identified in that document, the six standards for what principals should know and be able to do are (p. 8):

1. Lead schools in a way that places student and adult learning at the center.
2. Set high expectations and standards for the academic and social development of all students and the performance of adults.
3. Demand content and instruction that ensure student achievement of agreed-upon academic standards.
4. Create a culture of continuous learning for adults tied to student learning and other school goals.
5. Use multiple sources of data as diagnostic tools to assess, identify, and apply instructional improvement.
6. Actively engage the community to create shared responsibility for student and school success.

Although there is no specific reference to students with disabilities, it is assumed that 'all students' refers to both general and special education students. Most of the standards focus on high academic and social achievement, continuous learning, effective instructional practices, and shared responsibility. This document places emphasis on setting high expectations on the performance of adults. In other words, if learning is to be improved, teaching must also be improved. NAESP encourages principals to develop their understanding of effective curriculum and instruction by updating their own professional development to maximize the teaching and learning of all educators and students (NAESP, 2001).

### *Elementary Principals and Special Education Instructional Leadership*

Researchers have examined instructional leadership for 25 years and concluded that elementary principals' instructional leadership skills can affect the quality of instruction students receive (Hallinger & Heck, 1996; Meek, 2000; Witziers et al., 2003). However, instructional leadership practices used by elementary principals to ensure students with LD receive effective instruction and an appropriate public education are largely unexplored. A small number of dissertation studies reported on the perceived roles and responsibilities of the directors of special education and principals supervising special education programs. These studies resulted in prescriptive lists of the knowledge, skills, and values needed, including a broad array of competencies in such areas as communication, staff development, personal evaluation, instructional programming, and collaboration. (Franks-Randall, 1998; Severance, 1997; White, 1993) Additional studies reported the perceptions of teachers and special education supervisors concerning the infrequency and low quality of instructional supervision for special education (Clouse, 1993; Farley, 1991).

Although few published studies examining special education instructional leadership exist, researchers have provided implications related to the topic and suggest that as instructional leaders, principals are responsible for developing a school culture that embraces high academic standards and expectations for all students. Additionally, principals must have the necessary knowledge to provide all students with comprehensive, high-quality, instructional programs that are firmly grounded in educational research (Bateman & Bateman, 2002; Blasé & Blasé, 2004; Crockett, 2002; DiPaola &Walther-Thomas, 2003; Lasky & Karge, 2006; NAESP, 2001), if they are to fulfill the expectation of academic excellence for all students (i.e., NCLB) and provide instructional leadership support to their teachers.

Barnett and Monda-Amaya (1998) suggest that as instructional leaders and agents of change, principals must display knowledge and skills of effective instruction, assessment, and discipline to provide support and feedback to teachers working with all students, especially students who are in the greatest need—students with disabilities. Second, it is critical for principals to acquire skills in establishing and supporting instructional teams and to possess the knowledge to support and facilitate collaborative group interactions between general and special educators. These competencies are important ideals for every school leader and are critical to meet the needs of students with disabilities, including those with LD.

Williams (2000) suggests that instructional leadership may be used as a tool to potentially help educators fulfill the individualized purpose of the IDEA by ensuring that a qualified student receives a free, appropriate education that emphasizes special education instruction. Instructional leadership can also promote positive learning outcomes if persons who assume the responsibility are aware the 'special' in special education implies that special populations require special kinds of instruction" (Williams, 2000, p. viii). Indeed, research has indicated that when principals

focus on fundamental instructional issues, demonstrate support and knowledge of special education, and provide ongoing professional development, academic outcomes for students with disabilities and others at risk improve (Klingner, Arguelles, Hughes, & Vaughn, 2001).

Finally, Bays and Crockett (2007) examined instructional leadership for special education instruction and used observations and single interviews to generate a theory describing how instructional leadership for special education occurred in small, rural elementary schools with limited instructional resources. Of particular interest were the practices and people used to supervise specially designed instruction, the needs that were addressed by these supervision practices, and the conditions that caused supervision to be conducted as it was. The findings revealed that principals negotiated among competing priorities and contextual factors in attempting to provide instructional leadership for special education. The outcome of this negotiation was the dispersal, rather than the distribution, of responsibility among administrators and teachers in ways that weakened instructional leadership for special education and risked its potential benefits. For example, principals were more involved in legal compliance and more immersed in procedural matters than instructional concerns. Thus, their interaction level among teachers related to improving teaching and learning for special education students was minimal, if at all.

*Hypothesis*. The hypothesis for this study regarding instructional leadership practices utilized by elementary principals to promote the instruction of students with LD, is that principals with higher understanding and positive perceptions regarding the implementation of effective instructional strategies for students with LD may utilize more developed instructional leadership practices to promote educators' instruction of students with LD.

*Summary*

A detailed evidence base of instructional strategies associated with improved outcomes for elementary students with LD exists in the literature. However, research related to elementary general and special educators' instruction for students with LD has found that undifferentiated, whole-group instruction prevails in classroom as teachers' report a lack of knowledge, skills, planning time, collaboration, and administrative support. To compound this problem, elementary principals report limited preparation or training related to special education, including instruction for students with LD. Although research has documented positive effects of principal instructional leadership, conceptual models suggest instructional leadership practices require principals to engage in active collaboration with staff to promote the academic achievement of all students, including students with LD. However, elementary principals may be limited in their ability to promote effective instruction for students with LD if they do not possess a general understanding and positive perceptions regarding the instruction of students with LD. Therefore, I hypothesize that the level of understanding and perceptions of each of the five principals regarding effective instruction for students with LD may reflect the degree to which they have received related special education training; the level of understanding and perceptions will also manifest in the principal's ability to utilize instructional leadership practices to promote educators' instruction of students with LD.

# Chapter 3

## Method

School reforms and recent federal policies, including the No Child Left Behind Act (NCLB, 2001) and the Individuals with Disabilities Education Improvement Act (IDEA) 2004 (Office of Special Education Rehabilitation Services, 2004) have placed emphasis on the instructional leadership role of elementary school principals as they are faced with the responsibility of promoting educators' instruction of all students, including students with LD. An extensive body of literature exists documenting effective instructional practices associated with improved outcomes for students with LD (Elbaum et al., 1999; Kavale & Forness, 2000; Swanson et al., 1999; Vaughn et al., 2000). However, the knowledge base lacks any detailed data related to elementary principals' understanding and perceptions of effective instructional practices for students with LD. Furthermore, research suggests effective instructional leadership practices exhibited by principals can make a positive impact on instruction. However, very little is known about elementary principals' instructional leadership practices for students with LD. Therefore, the purpose of this descriptive study was to use a multiple-case design to explore five elementary principals' understanding and perceptions of instructional practices associated with improved outcomes for students with LD and their instructional leadership practices utilized to promote educators' instruction of students with LD.

### *Research Questions*

The following research questions guided this study conducted with elementary principals perceived as effective special education leaders:

1. What instructional practices do they identify as associated with improved academic outcomes for students with LD?
2. How necessary and feasible do they perceive these practices for students with LD?
3. What instructional leadership practices do they utilize to promote educators' instruction of students with LD?

To address these research questions, data sources combined interviews with elementary principals special educators, and general educators from five elementary schools located in a large, urban district.

### *Research Design*

The research design is a case study, which is defined as an investigation of a phenomenon that "occurs in a bounded context that cannot be understood outside of the context in which it takes place" (Yin, 2003, p.14). A case study is a comprehensive research strategy encompassing both data collection and data analysis approaches that are logically linked to the research questions being investigated (Yin, 2003). When the study of interest is intertwined with its context, a case study is an appropriate method of inquiry. A descriptive, multiple-case study design using qualitative data collection and analyses procedures (Miles & Huberman, 1994; Strauss & Corbin, 1998) was utilized to examine the phenomenon of elementary principals' understanding and perceptions of instructional practices associated with improved outcomes for students with LD and their instructional leadership practices utilized to promote educators' instruction of students with LD. The qualitative methodology used allows only for associations to be explored - causality was not determined. In addition, these case studies are descriptive, as very little research has examined elementary principals' understanding and perceptions of

instructional practices associated with improved outcomes for students with LD or their instructional leadership practices utilized to promote educators' instruction of students with LD. The majority of research conducted has been surveys. Unfortunately, surveys are limited regarding the specific information they collect as well as their ability to investigate context (Yin, 2003). Finally, a case study design was the preferred methodology because they are especially appropriate for exploring new, developing practices such as elementary principals' understanding and perceptions of instructional practices associated with improved outcomes for students with LD and their instructional leadership for students with LD.

### *Unit of Analysis*

According to Yin (2003) the unit of analysis in a case study is determined by the manner in which the research questions are defined. For this study, the unit of analysis was at the individual level, the principal, as the research questions focused on exploring and describing elementary principals' understanding and perceptions of instructional practices associated with improved outcomes for students with LD and their instructional leadership for students with LD. Focusing at the site level may have produced an abundance of data thus hampering the ability to focus on the principal as the unit of analysis. However, one general educator and one special educator from each site were interviewed to inform the analysis of the principal to confirm, refute, or extend data gathered during principal interviews.

### *Procedures*

Procedures included: (a) determining setting, (b) selecting participants (cases), (c) collecting data, and (d) analyzing data.

*Setting*

A large urban district was selected from which to conduct this study. Major urban districts are defined as those that have the greatest number of students in counties with populations over 650,000 and who have 35% or more economically disadvantaged students (Public Education Information Management System [PEIMS]/Texas Education Agency [TEA], 2007). It is critical to understand how major city school systems are meeting the educational needs of all students as urban educators are challenged with complex problems often associated with poor student achievement such as poverty, cultural and linguistic diversity, and race.

The district selected to serve as a pool from which to draw participants for this study was targeted because it encounters all of the challenges of a typical metropolitan district. For example, over 82, 000 students attend 113 schools including 78 elementary schools across the district. Fifty-eight percent of the students in the district are Hispanic, 26% are White, and 12% are African American. Sixty-two percent of the student population comes from economically disadvantaged households as measured by eligibility for free and reduced lunch under the National School and Child Nutrition Program or other public assistance and 22% are identified as limited English proficient (LEP) (PEIMS/TEA, 2007). According to 2007-2008 district data, 10 % of the student population is served by special education (4, 040 of the total school population with LD). According to the district's website, "special education" refers to specifically designed instruction to meet the unique needs of a child with a disability. The district's special education department's mission "is to promote the understanding of what is meant by every student and the individual nature of an excellent education." Students in the district take the Texas Assessment of Knowledge and Skills (TAKS), the statewide assessment in reading and math.

*Selecting Participants*

*Principals.* As is common in qualitative research (Miles & Huberman, 1994), purposeful sampling was used. Specifically, a multiple-gating procedure was employed to identify principals who met selection criteria and were potentially informative cases. The five participating elementary principals met the following criteria: (a) perceived as an effective special education leader (i.e., knowledgeable about special education and/or interested in improving the academic achievement of special education students) by the district special education director, (b) students in their special education subgroup demonstrated growth over two consecutive years on AYP assessments, (c) students identified as economically disadvantaged (i.e., receiving free or reduced lunch) comprised at least 75% of the site's student population, (d) had at least three years of experience as an elementary principal, and (e) willing to participate in the study. The purpose of considering these participant selection contextual factors was not for comparative data analysis; rather the intention was to gather rich, meaningful information from participants, to shed light on the most positive educational experiences students with LD may experience and to gather data from a school site which may be considered "beat the odds" due to its high percentage of students from a low SES background (See Table 1 for school demographic data and Table 2 for AYP data).

Following district research policy guidelines, the five selected elementary principals were contacted by the researcher regarding their potential participation in the study. Of the first five principals contacted, two declined to participate in the study due to time constraints. I contacted two additional principals and both agreed to participate (see Table 3 for principal demographic data).

*Teachers.* One special educator and one general educator from each selected principal's site were asked to participate to serve as a data source to further inform the analysis of the principal. Indeed, both special and general educators have consistently identified lack of principal support regarding the instruction of students with disabilities as a critical factor that affects their ability to implement specially designed instructional practices and instruct students with disabilities confidently and effectively (Billingsley, 2004; Gersten et al., 2001; Scott et al., 1998; Scruggs & Mastropieri, 1996).

Principals were asked to identify one special educator at their site who was effective with working with students with disabilities and had at least two years' of experience teaching students with LD. The special educator was then asked to identify one general educator at their site who was effective with working with students with disabilities, had at least two years' experience teaching students with LD, currently had at least one student with LD who was included for at least 50% of their school day, and teaches grade three or higher (AYP). All special educators and general educators contacted agreed to participate in the study (see Table 4 for teacher demographic information).

*Consent and Confidentiality*

After receiving approval from the Institutional Review Board at the University of Texas at Austin and the Office of Accountability in the Austin Independent School District, I obtained consent from each principal and educator prior to beginning data collection. All tapes, transcriptions, and written notes were accessible only to the researcher, principal participants, educator participants, peer debriefer, and professor supervising the study. To maintain anonymity, the school district, school sites, principals, and educators are identified with pseudonyms (see Appendix A for IRB consent form).

*Data Collection Procedures*

Data collection occurred over a six-month period from mid May to mid November 2008 in several stages:

1. Initial screening of schools and principals and subsequent selection of principals.
2. Initial interview with principals.
3. Final interview with principals to probe deeper into subject areas in order to clarify, confirm, and share data collected. Identification of potential special educator participants.
4. Interviews with special educators and identification of potential general educator participants.
5. Interviews with general educators.

*Principals.* Each principal was interviewed twice during the summer of 2008, with approximately six weeks between the initial and final interviews. Once the principals agreed to participate, I communicated with each one individually via email to establish the date, time, and location of the first interview. After securing each principal's consent, I asked for written, descriptive data before audio taping each interview (see Appendix B for principal demographic form). During the interview, I followed the interview protocol by asking a question, eliciting responses from each principal, while taking anecdotal notes related to body language, tone, and other points of interest. After each question was asked, I summarized the participants' responses and asked for feedback, clarification, or additional input. All initial interviews were held in the principal's office at their school site and lasted approximately 45 minutes to one hour. At the conclusion of the first interview, the date, time, and location of the final interview were arranged. Also, one of the requirements for inclusion in the study was that participants were willing to

review transcripts. I asked each principal if it was acceptable to send an electronic copy of the document for review. To increase trustworthiness, I summarized key interpretations of transcripts and sent them to each participant for their feedback, corrections, or elaborations. Member checks were performed for all initial interviews with no additions, edits, or additional feedback offered by participants. Thus, the initial interviews were conducted, transcribed, and sent for a member check to each participant before the final interviews were conducted. All final interviews were also held in the principal's office at their school site and lasted approximately 45 minutes for a total of approximately 90 minutes interview duration for each principal. All final interviews were transcribed and sent to participants for member checks with no changes noted by participants. All member-checked transcripts were later used for data analysis.

*Teachers.* Both special education teachers and general education teachers selected to participate were interviewed once. After teachers agreed to participate, I communicated with each one individually via e-mail and established the date, time, and location of the first interview. All interviews were held at each teacher's school site and typically occurred in their classroom. After securing each teacher's consent, I asked for written, descriptive data before audio taping each interview (see Appendix C for teacher demographic form). During the interview, I followed the interview protocol by asking a question, eliciting responses from the teacher, while taking anecdotal notes related to body language, tone, and other points of interest. After each question was asked, I summarized participants' responses and asked for feedback, clarification, or additional input. The average duration of each interview was approximately 30 minutes. One of the requirements for inclusion in the study was that participants were willing to review transcripts. I asked each teacher if it was acceptable to send an electronic copy of the document for review. To increase trustworthiness, I summarized key interpretations of

transcripts and sent them to each participant for feedback, corrections, or elaborations. Member checks were performed for all teacher interviews with no additions, edits, or additional feedback offered by participants.

*Data Sources*

Data sources included principal interviews, special educator interviews, and general educator interviews.

*Interviews.* Interviews use oral questions to which participants respond that enables researchers to report the interpretation of events "through the eyes" of the interviewees and to gather information directly from participants (Yin, 2003). Interviews are useful tools in qualitative case study research, as the researcher attempts to assemble a rich description of the case (Yin, 2003). The present study utilized a focused interview approach. Focused interviews consist of a predetermined, sequenced, set of questions with probes for additional information (Kvale, 1996; Yin 2003). According to Patton (2002), focused interviews facilitate data analysis by making responses easy to find and compare.

*Principal interview protocol.* Two interviews were conducted with each principal for a combined total of approximately 90 minutes. Principal interviews served as the primary data source. The purpose of principal interviews was to explore the principal's understanding and perceptions of effective instructional practices associated with improved outcomes for students with LD and their instructional leadership practices utilized to promote educators' instruction of student with LD. Topics for interview questions focused on the variables of interest in the research questions (i.e., effective instructional practices for students with LD and instructional leadership practices) (Gall, Borg, & Gall, 1996) (see Appendix D for correlation of research questions and interview questions). The questions for the measure were derived by implementing

a three-step process: literature review, expert review, and pilot test. After completing the literature review, the initial measure consisted of 15 questions; however, based on the suggestions made by the expert reviewers, the resulting measure consisted of 13 questions. The measure was then piloted with three current elementary principals who are effective with working with students with disabilities. Based upon the participants' responses and feedback, minor revisions were made to clarify questions. The final interview measure consisted of 10 questions. Three questions were omitted due to ambiguity (see Appendix E for the initial principal interview protocol).

The second, final interviews enabled the principals to clarify, extend, and delve deeper into previous responses made during the initial interview. In other words, previous responses made by principals during the initial interviews served as springboards to develop questions for the final interviews. The purpose of this was to address the research questions adequately and to provide another means of member checking. The final interviews were made up of approximately eight questions. Sample questions included:

1. You indicated instruction for students with LD is "not really different." Can you elaborate on this? What are some examples of best practices for students with LD that you believe allow them to learn effectively?
2. You mentioned one of the strategies provided to educators to facilitate effective instruction for student with LD was to help them figure out how to work with students with LD. Can you please describe steps you would take to help a teacher figure out how to deliver effective instruction for a student with LD? (See Appendix F for an example of a follow-up principal interview protocol).

*Educator Interview Protocol.* The Educators Instruction for Learning Disabilities (EILD) interview protocol was designed specifically to explore both special and general educators' perceptions of their principals' understanding of effective instruction for students with LD and their instructional leadership practices utilized to promote their instruction of students with LD. Data gathered served to confirm, extend, or refute data collected during principal interviews. Topics for interview questions focused on the variables of interest in the research questions (i.e., effective instructional practices for students with LD and instructional leadership practices) (Gall, Borg, & Gall, 1996). The questions for the measure were derived by implementing a two-step process: literature review and pilot test. The initial measure consisted of nine questions; however, based on the suggestions made by the pilot test participants, the resulting measure consisted of 10 questions. An additional question was added to clarify the potential for gathering data pertaining to support strategies offered by principals. Questions used during the interview were both general and specific (sample questions: Who provides support and information to you regarding your instruction of students with LD? What opportunities do you have to communicate with your principal about instruction for your students with LD?). (See Appendix G for the teacher interview protocol).

## *Data Analysis*

To explore elementary principals' understanding and perceptions of instructional practices associated with improved outcomes for students with LD and their instructional leadership practices utilized to support educators' instruction of students with LD, data analyses were carried out in two sequential data flows. Principal interview data was coded separately from teacher interview data because it was important to analyze all principal interview data (what

principals report they know and do) and educator interview data (what educators report their principals know and do) separately. Transcripts of principal interview data was the primary source of analysis, with teacher interview data used to broaden, confirm, or refute findings. Thus, data collected from each principal comprises a single case. Each interview was audiotaped and transcribed. Transcripts were proofread and edited by returning to the audiotapes and anecdotal notes taken during the interviews for clarification of data.

The goal of analysis is a "viable interpretation" of the data that has been collected. Miles and Huberman (1994) described the process of analysis as interactive and cyclical flows of activity that begin early in the development of the study and continue through the reporting stage, including: (a) data reduction, (b) data display, and (c) conclusion drawing and verification. Analysis of qualitative data for this study was based on the task conceptualization of Strauss and Corbin (1998) and followed the three flows of analysis described by Miles and Huberman (1994). These methods are described below.

*First flow: data reduction.* The first flow of analysis, data reduction, included coding of initial data from interviews and took place continuously throughout the study. Each data source was coded according to a predetermine list of codes created prior to interviews (see Table 5 for list of start codes). These *a priori* start-list of codes were developed from the research questions (Miles & Huberman, 1994) and covered the two focus areas: (a) instructional practices for students with LD, and (b) instructional leadership practices. I manually coded all data sources according to this list.

As is typical when coding, start codes were revised as needed in order to make better sense of the data. When the start codes were revised, all of the data previously coded was re-analyzed, thus data was broken down further into new categories and sub-categories (see Table 6

for the list of revised codes). During this flow of analysis, I also used teacher data to confirm, extend, or refute data provided by principals. Summaries of individual principals (i.e., within–case analyses) resulted from the initial phase or flow of analysis.

*Second flow: data display*. The second flow of data analysis involved developing an organized visual display or framework of coded information (i.e., a matrix). Coded data from each summarized case was displayed based on variables related to the research questions. The columns contained headings related directly to the variables regarding understanding and perceptions of instructional strategies and instructional leadership practices utilized, while the rows were the individual principals. Reading across the rows provided a profile for each principal, while reading down the columns allowed comparisons between principals on specific variables (see Table 7 for the completed matrix). Next, a cross-case analysis (Miles & Huberman, 1994) was used to better understand the data patterns and locate common themes within the cases of individual principals and across the cases of all principals.

*Third flow*: *conclusion drawing and verification.* When themes have developed through the process of analysis, conclusions must be verified or tested for believability (Miles & Huberman, 1994; Strauss & Corbin, 1998). In the third flow of analysis, meanings from the data emerged from patterns, themes, relationships between variables and regularities in the data. I examined early conclusions with skepticism (Strauss & Corbin, 1998) and confirmed and verified conclusions throughout the study by returning to the transcriptions of interviews, to review and confirm the theories that were developing. The goal of the analysis process was to come to conclusions and/or propositions (Yin, 2003) regarding the research questions that may warrant further study or help explain a phenomenon that occurs in the data.

### *Coding Reliability*

An experienced graduate student double-coded 10% (the first interview) of the principal interview audiotapes to establish coding reliability. Reliability was calculated by dividing the number of agreements with the sum of the total number of agreements and disagreements (Miles & Huberman, 1994). Any disagreements were resolved through discussion until we established a consensus. Reliability of 90% was achieved.

# Chapter 4

## Findings

The purpose of this descriptive study was to use a multiple-case design to explore five elementary principals' understandings and perceptions of instructional practices associated with improved outcomes across academic areas for students with LD and their instructional leadership practices utilized to promote educators' instruction of students with LD. Qualitative methods were used to collect and analyze the data. The following research questions guided this study conducted with five elementary principals perceived as effective special education leaders:

1. What instructional practices do they identify as associated with improved academic outcomes for students with LD?
2. How necessary and feasible do they perceive these practices for students with LD?
3. What instructional leadership practices do they utilize to promote educators' instruction of students with LD?

To address these research questions, data sources combined (a) multiple interviews with elementary principals; (b) single interviews with special educators; and (c) single interviews with general educators from five elementary schools in a large, urban district. This chapter is organized into two sections. Section I presents the results of each principal's within case analysis. Each case is organized to address the three research questions. Also, the individual cases are sequenced to suggest a continuum describing principals with limited instructional leadership practices for students with LD to those with the most highly developed. The second section includes common results or themes found after completing the cross-case analysis of principal cases.

## *Case Study A*

### *Description of Principal A*

Principal A is a male with 21 years of experience as an elementary principal who is currently in his third year at his current site. He was primarily a secondary educator and instructional coach prior to becoming a principal. He holds certificates in secondary education (Spanish, bilingual education, social studies, language arts) as well as administration. He completed his M.A. in educational administration and reported completing two college-level special education courses (law and special populations) as well as two special education-related trainings focused on inclusive practices during the past two years.

### *Understanding and Perceptions of Instruction for Students with LD*

*Students with LD and ELLs require similar methodology.* Principal A described effective instructional strategies for students with LD as being very similar to effective strategies used for English language learners (ELL). He articulated a wide knowledge base regarding effective instructional strategies for ELLs and also mentioned several strategies that are associated with improved outcomes for students with LD (i.e., explicit modeling, interactive, small groups, procedural facilitators, questioning techniques, scaffolding, controlling for task difficulty), thus conveying a high understanding of effective instructional strategies for students with LD. He explained that his teachers are able to support students with LD because the majority of students on campus are ELLs (i.e., 70%) and teachers inadvertently use the same strategies. He mentioned students require several strategies that he labeled as "good teaching."

> The reason it works for us is our large number of students who are ELL and they require a lot of special education type strategies. Frankly, for our special ed students, it's the same thing…. a lot of intensive work on connecting prior knowledge, scaffolding, graphic organizers, breaking things down into chunks, visuals, manipulatives….modeling….and charts or rubrics to show

> students what the steps or procedures are to accomplish an objective….a lot of review and discussion and effective questioning techniques with varied levels of questioning….It's not just for special ed, but it includes special ed kids…These things are good teaching and will help all kids access and make connections….it's just that special ed students may need more avenues to access a concept or skill.

Principal A also noted that all students, including those with LD, require the same type of overall lesson cycle that includes whole group instruction followed by guided, small groups. He pointed out that small group instruction is when students with LD have an opportunity to receive specially designed instructional practices:

> They [regular education and special education students] need the same overall lesson cycle….whole group followed by interactive groups. Small, guided homogeneous groups work on specific, diagnosed targeted objectives based on the needs of individual students. This is when the special education teacher is able to adapt….content for students or differentiate instruction or assessment and students get more individualized attention and can practice skills more.

Both teacher informants described how monitoring students with LD during whole group instruction, followed by small, guided groups that consist of students with LD as well as non-identified students, was the most prevalent model of delivering instruction.

Principal A also expressed that although specially designed practices are necessary, they are challenging and unrealistic to implement, and "normed" rather than truly individualized:

> It's very difficult and challenging [to adapt] when the special education teacher has 15 students with different needs. You're not going to be able to [implement specially designed practices] realistically. The regular ed teachers do the common planning, but the special ed teacher has got to be thinking of modifications for all areas, so they agree on common norms or protocols more than specific, or adapting worksheets or assessments, like less problems or doing multiple choice according to the IEP.

*Instructional Leadership Practices for Students with LD*

*Satisfying Inclusion Criteria.* Principal A indicated that students with LD receive most of their instruction through an inclusion model in the regular classroom; however, some students

who need more intensive support receive instruction in the resource room. He elaborated that this model is effective for two reasons: "It provides good expectations and academic rigor because students are able to access the core curriculum in the regular classroom….And students receive instruction with their peers to satisfy inclusion criteria." He did not clarify the process for determining where and how students with LD receive instruction or supplemental intervention. However, the special educator suggested that she decides instructional delivery services for students with LD:

> I decided early on after reviewing IEP goals and working with them what placement was appropriate, like if they should stay in the classroom or be pulled. I just pulled a student yesterday into resource because he was struggling and the support in the regular classroom just wasn't enough to attack skills that he needed.

Principal A noted the special education teacher or her assistant provide services to identified students as well as other students who may be struggling. He reiterated meeting inclusive status criteria as a factor for allowing students with LD to receive instruction with their non-identified peers and stated:

> Outside of the classroom, in order for us to maintain our inclusive status, we sometimes pull out slow learners, so the resource room becomes another regular ed setting because we try to minimize the isolation of special education students for practical and political purposes in terms of non-inclusive environments.

*It's a challenge to motivate our teachers.* Principal A described his key role regarding special education as collaboratively creating a school-wide vision for special education services and making sure the campus is on track to accomplish the vision:

> My role is to facilitate the development of a school wide vision for student services. In particular with special ed, to collaboratively envision and develop school improvement for special ed services and getting shared ownership over that vision in terms of inclusive services, how we allow access to the

> core curriculum, and have kids reach their highest level of potential. That is my responsibility to make sure that we are on track.

However, when asked how he collaboratively develops a school-wide vision for special education, he noted it is a challenge to encourage teachers to be accountable for instructing all students, including those with LD. Principal A did not articulate a plan for accomplishing this task, other than a training that did not take place (see special educator's comment below) and indicated:

> It's a challenge to motivate all of our teachers to meet the needs of special ed students. We are still trying to develop a culture of breaking down categories and it's just that they are our students who have special needs. We plan to work on it with training before school starts on inclusive practices.

Overall, Principal A made few statements that seemed to promote a mindset of collaborative accountability for teaching all students. Furthermore, discussion with both teacher informants indicated an unawareness of how Principal A motivates staff to meet the needs of all students and a general lack of discussion related to special education. The special educator explained:

> There is never any mention of special education during faculty meetings. We do talk about struggling kids, but just standard ideas. We [principal and special education team] made a plan to do an in-service training on inclusion, but the whole thing ended up not happening. I don't see any philosophy from him about including kids, I am sure he has one, but I don't know.

Teacher data also suggests the lack of a collaborative effort by all staff members, in particular the instructional support team (i.e., specialists and instructional coaches), related to providing instructional services to special education students and teachers. For example, the special educator noted:

> Our coaches and specialists do not help so much with special ed….They include a couple [special education students] in their groups, but for the most part, they are separated out when making groups. We have been fighting,

> that's your kid, not our kid. It's an issue with everyone taking ownership of special ed kids. It has definitely been a struggle.

The information provided by Principal A and the teacher informants suggests that the principal does not have a plan clearly formulated or articulated to develop a collaborative mindset of accountability amongst the staff regarding instruction of students with LD.

*Special educator expected to take the lead.* When asked who was responsible for supporting educators' instruction of students with LD, Principal A noted that the special educations teacher (i.e., resource) and her teaching assistant collaborate to provide support. He focused on adapting and modifying lesson plans as the primary practice in which the special educator supports the regular educators' instruction for students with LD. He explained that monitoring lesson plans is a key practice he utilizes to monitor teachers' instruction of students with LD and asserted that adapting instruction for students with LD rests on the special education teacher's shoulders and that it is her responsibility to make sure it happens:

> It's important for the special education teacher to take the lead to meet with teachers to discuss lesson plans…. It's the expectation for her to interact with them about adaptations and sensitize them to some of the issues they will face and for her to be aware of the content to make modifications…. I expect her to comply with the lesson plans written by the grade level with modifications.

The special educator confirmed that she is primarily responsible for providing specially designed instruction by adapting or modifying the regular educators' lesson plans for included students, but expressed that it is a difficult process and that she perceived no monitoring or support from Principal A:

> I look at the lesson plans for the included kids, it's required, but it's not monitored at all ever, ever, ever….they are supposed to be posted on-line by Friday for the next week, but they are still not all up and are vague, so sometimes it doesn't work….Although I put into writing what I will modify, a lot of times it's just bringing my bucket of manipulatives and scaffolds and just winging it.

The general educator expressed that although the special educator is the first person she goes to if support is needed for her included students, collaborating is very difficult because there is little opportunity to do so. For example, there are scheduling conflicts that prevent the special educator from attending grade level meetings and monthly half-day planning sessions, which hinders their ability to collaboratively plan together. The general educator noted: "We do our grade level collaborative planning at these meetings and decide what we will do….The special ed teachers are not usually there." Overall, the information presented suggests a discrepancy between Principal A's high expectations for the special educator and the obstacles that affect her ability to perform her responsibilities to support educators' instruction of students with LD. Further, data suggests that Principal A does not actively promote collaboration among staff, in particular between special and general educators, regarding instruction for students with LD.

*We have to initiate everything.* Principal A described his main role as administrator as supporting and developing his staff through a combination of practices such as walk throughs or observations, informal conversations, and continuous staff development. However, interviews with teacher informants revealed a significant perceived contrast in the amount of administrative support provided to special educators as opposed to general educators. For example, discrepancies regarding communication with administrative personnel, planning, collaboration, and professional development opportunities were noted.

It is important to mention that Principal A explained that his assistant principal (AP) coordinates the day-to-day special education operations. The special educator confirmed that she would seek out support from the AP if needed, but also expressed that she has very limited interaction with the AP and Principal A:

> She is kind of the special ed principal and is helpful in situations….And about having an open door and trying to problem solve, but I have to initiate everything….If there was no one else for me to go to for help, I would think he could shed light, but I would not even think to go and ask him.

Furthermore, when asked how often she interacts with Principal A or the AP regarding instruction, the special educator stated:

> He came in my classroom one time last year….He has not been in this year. My AP never comes into my room….only once last year for my evaluation. Sometimes he sees me in the inclusion classrooms, but it's not for me and he never leaves me feedback or talks to me about my instruction. There is never discussion about my instruction with them, but there is for the rest of the teachers.

On the contrary, information gathered during the principal and general educator interviews were remarkably different from the special educator's perspective on administrative collaborative support. For example, Principal A indicated that frequent walk throughs with written feedback as well as informal conversation about instruction are the most typical types of practices used to promote teachers' instruction of students with LD. The general educator expressed that she has frequent interaction with Principal A regarding instruction for her included students:

> I have every opportunity to talk with him. He has an open door policy and does walk throughs at least once a week. He will give you a comment, sometimes it's written, that's always positive and about instruction. I think his favorite thing is to be the instructional leader….I talk to him maybe daily.

Similar discrepancies were discovered related to opportunities to plan and collaborate. Both Principal A and the general educator reported that general educators receive a monthly half-day to plan with their grade level. However, the special educator indicated members of the special education team were not invited and elaborated:

> The GE teachers had a half day of planning….We started pushing for it, and got it, but it's not with the grade level we work with…. so it defeats the

> purpose. Weekly grade level meetings are hard to attend….If we want to plan, it's all up to me and no one monitors it….We plan for inclusion on an individual level.

Furthermore, Principal A suggested that internal support and training to develop gaps in teacher knowledge and skills is a critical strategy utilized to promote teachers' instruction for all students, including those with LD:

> It's continuous staff development focused on needs assessment and working with them in terms of what their skills are and what they need. It's both coaching from our staff and sending them to trainings in areas where they have gaps.

Principal A described the instructional support staff (i.e., mentor teachers, curriculum specialists, instructional coaches) as "teacher leaders" who are responsible for providing appropriate materials and resources, observations, and instructional training. The general educator indicated receiving significant instructional support from the support network of "teacher leaders." On the contrary, the special educator explained that she receives very little instructional support or resources from the instructional support team. She expressed relying on other special educators for support as well as a few general educators for content information. Both teacher informants noted that half-day planning sessions for general educators include training from the instructional support team. However, the special educator stated, "We have never had training from them or been invited to participate, so I asked for a training, but they are hesitant and say they have to make sure it's O.K., so we're waiting." The special educator explained that she and the special education team typically seek out their own training opportunities:

> We as teachers will find what we want…. it's not a discussion with anyone. No one asks us about what type of support we need or follows up after we attend trainings. There is not a whole lot of contact to tell the truth unless we initiate it.

*Summary*

Principal A asserted that effective instruction for students with LD is very similar to strategies used with ELL's and identified several instructional strategies associated with improved outcomes for students with LD, thus conveying a high understanding of effective instruction for students with LD. He indicated that implementing specially designed instructional practices is a necessary expectation for the special educator; however, implementation of "specific" individualized strategies is challenging and unrealistic, thus more "normed" strategies are typically implemented to meet the needs of students with LD.

Principal A expressed that students with LD receive instruction in the regular education classroom, as well as the resource room, with non-identified peers to provide them access to the rigorous general curriculum and to satisfy inclusion criteria. The process for determining instructional services was not clearly articulated by Principal A. However, teacher data suggests that the special educator is responsible for deciding how instructional delivery will occur for students with LD and that these students are typically separated out from their peers when forming intervention groups.

Principal A's instructional leadership practices for students with LD appear to be limited and compromised due to competing priorities, such as the focus on instruction for ELLs. For example, although he mentioned his awareness of the challenge to improve teachers' accountability for instructing all students, he did not clearly articulate a plan for developing this inclusive, collaborative mindset nor did he indicate practices to promote collaboration between staff, especially between special and general educators. Furthermore, teacher data suggests a perceived significant discrepancy between the general and special educator regarding the amount of administrative interaction and support to promote all teachers' instruction of students with LD.

More specifically, although it appears Principal A perceives himself as creating a collaborative vision related to supporting teaching and learning for all educators and students on campus, his vision does not appear to include equitable interaction or accountability of teachers for implementing effective instruction for students with LD. Also, instructional leadership responsibilities for students with LD appear to be dispersed to the assistant principal and the special educator is expected to take on the majority of responsibility for providing specially designed instruction to students with LD with only minimal administrative interaction and support.

Principal A's high understanding of instructional strategies for students with LD may not be sufficient to promote teachers' instruction of students with LD if his instructional leadership practices to facilitate accountability and collaboration among teachers are not developed. Finally, meeting the individualized needs of students with LD does not appear to be a high priority for Principal A. Again, perhaps the high focus on ELL achievement and the small number of students with LD (i.e., AYP subgroup less than minimum number to be rated) has resulted in the students with LD being somewhat overlooked. Additionally, Principal A has only completed three years as principal at his current site.

## *Case Study B*

### *Description of Principal B*

Principal B, a female, has six years experience as an elementary principal, five of which have been at her current site. She was primarily a secondary reading and language arts teacher as well as a reading specialist during the 12 years prior to becoming a principal and holds relevant certificates in administration and secondary English, Spanish, and reading. She completed her

M.A. in reading and reported completing zero college-level special education courses. She also reported attending one special education related training focused on inclusive practices during the past two years.

*Understanding and Perception of Instruction for Students with LD*

*It's that all kids learn differently.* Overall, Principal B described an instructional approach she believes benefits all students, not just students with LD. She hinted at the concept of differentiation and stated:

> Ummm….My approach is those who have trouble just need more time or we need to do something differently for them. It's just that whole idea of you have to keep working at it and you can't give up…. We need to figure out ways to help them keep working at it….It's more individualized attention….Maybe it's another kid to support them or manipulatives, or resources they can use to get to the answer.

Principal B expressed a limited understanding of instructional strategies associated with improved outcomes for students with LD by not clearly articulating specific instructional practices to meet the needs of students with LD. However, she indicated students with LD require individualized attention as well as extra time, motivational strategies, differentiated instructional approaches, and supportive resources.

After the researcher supplied examples of specially designed instructional practices, Principal B communicated that specially designed practices that benefit all students are absolutely necessary and a professional expectation; however, training may be needed in order to make implementation feasible:

> It's that all kids learn differently and need different support systems and resources….That's just a no-brainer. What's good for special ed kids is good for all kids. Now somebody may need training or support to do that…. I think just as a professional and in doing what's right for kids they can do it.

*We no longer separate out the special ed kids.* Principal B advocated for a continuum of services to meet the educational needs of students with LD on her campus and indicated students with LD must be included in the regular classroom whenever possible. She placed heavy emphasis on meeting the needs of students with LD through reading instruction and examining all students' screening assessment data to determine small homogeneous reading intervention groups aimed at including students with LD and raising reading achievement:

> We look at all kids. It's very data driven….The foundation begins with small group reading instruction….We are including all students, regardless of their level of need or disability….We (i.e., principal, instructional support team) meet with teachers to decide and group kids by level of need…. We no longer separate out the special ed kids….Now everyone is included in what we do and special ed kids…. are not segregated. We can't think so much about labeling kids anymore.

Principal B elaborated that this model is effective "because everyone plays a role and it is a coordinated effort to raise achievement for all students." She indicated that not separating out students with LD when creating reading intervention groups is instrumental in helping special education students achieve greater AYP progress. The special educator expressed that she supports students with LD in regular classrooms as well as in her classroom:

> Students with LD are all serviced in the regular classroom to some degree. I monitor them during whole group and then…. small group that includes my students with other kids who need more intensive support…. They [students with LD] are also being pulled into groups with me with other GE kids in my classroom for more intensive intervention support.

*We are making the shift in mindset about how we serve kids.* Principal B expressed that she advocates for "changing teachers' thinking about how we can work with special education students." She described how after receiving district data outlining the percentage of special education students instructed in inclusive settings on her campus, she realized special education

students were being excluded and used dialogue that included logic, rationale, and data to encourage teachers to meet the needs of all students, including those with LD:

> It was a realization that we need to stop….excluding kids…. It's not setting aside the special ed kids when planning…. It was logical to do it through reading groups because we could be inclusive very easily….But teachers were like, "I don't know how to teach special ed kids," so it was a struggle. I had to show them data and talk through the whole logic and reasoning….Even the specialist said she didn't know and I said, "Yes you do, you've got kids in your groups that are….lower than special ed kids." Before we started making the shift, people would say they are already getting special ed, so they don't need to be included in groups. But now, it's more who needs help? So, it was just a shift in mindset about how we serve all kids.

Principal B also mentioned that she continues to develop teachers' accountability for instruction of students with LD through logical discussion, offering support, and publicly "celebrating success" by showing data that demonstrates positive growth for included students. Principal B noted, "I think seeing the growth kids make when you don't send them out of your room all day has been testimonial enough." The general educator described the principal's strategies for encouraging instructional accountability for students with LD:

> She encourages us to keep them [students with LD] in our classroom. She is very supportive compared to other principals. There's an overall message from her that they will be included and you need to work with other people. She sees them as just another student in your class and you need to figure out how to teach them.

On the contrary, the special educator expressed a lack of overall direction by Principal B regarding staff collaboration focused on including all students. For example, she described how some staff members are still resistant to instructing students with LD:

> I don't get the feeling she is trying to motivate the staff to meet all kids' needs and….how we will all work together to include them….There is a push for including them in small groups, [but] one specialist refuses to take special ed kids in her groups….So they are still excluded to some extent, but it has gotten better.

The data suggest that Principal B is in a transitional phase of changing the manner in which students with LD are educated on campus. More specifically, her actions and statements reflect an effort to change teachers' mindsets on campus by implementing practices that are aimed at raising accountability for instructing and purposefully including students with LD to raise their overall achievement level. However the transition has presented challenges, she noted:

> It's not an easy change and the campus is still in the process of figuring out how best to meet the needs of students with LD….Time and the amount of resources also play a factor…. We are not perfect and I don't pretend to say we have figured it out, but I think that is the direction we are moving in.

The special educator also indicated that Principal B is in a state of changing her practices regarding the education of students with LD and noted, "She wants it all to be logical. I think she wants to learn and we have seen changes and are very hopeful and do feel like we, and ultimately our students, are more supported than before."

*Professional development is a shared responsibility.* Principal B expressed that making sure all teachers are knowledgeable [about effective instructional practices for all students] and receive professional development as needed is one of her most important responsibilities regarding the instruction of students with LD. She explained how she works in collaboration with the support staff (i.e., instructional coach, reading specialists) and teachers to develop and deliver on-site trainings to insure all staff have appropriate levels of knowledge to meet the needs of all students:

> They [support team] are an extension of what I do, especially with training. We meet regularly and collaborate extensively to meet specific needs of teachers. All trainings are a direct result of conversations and observations. I often attend the trainings, then [they] facilitate and deliver trainings….And with any kind of training, everybody is involved in participating.

Both teacher informants agreed that Principal B places high priority on involving all staff in training opportunities. The general educator mentioned:

> She [the principal] does a lot of training and it includes strategies that are geared for all kids that is organized and systematic and that helps those kids [students with LD] too….She encourages us to sign up for trainings.

Although the special educator mentioned that Principal B encourages her to attend the same trainings as the regular educators as well as additional trainings as needed and reported that trainings are frequently held on site. She noted trainings "do not specifically address the needs of students with LD, but they have addressed differentiation for all students. I pull from those trainings and modify for my kids." Furthermore, she reported she approached the principal and offered to help develop and implement an in-service focused on inclusive practices; however, she noted, "the principal never got back to me."

*She means well, but is not sure what collaboration looks like.* Although Principal B made general statements that the staff must collaborate together to meet the needs of students with LD, both teacher informants reported collaboration regarding instruction and inclusive services for students with LD between regular and special educators is a difficult task and one that is not given direction by the principal. For example, when speaking about collaboration during interviews, Principal B always placed emphasis on her responsibility to make sure teachers and support staff collaborate during data analysis meetings and stated, "My main role with collaboration is making sure they coordinate and meet so that when we have data analysis sessions, everyone is represented in the conversations we have about kids." Other than that, there was little, if any, mention of other collaborative practices implemented by Principal B. The special educator confirmed this perception and explained:

> The only big collaboration is the data analysis meetings…. There is no school model or clear expectations for collaboration. There is no consideration for our schedules and it's hard to make it to all of the grade level meetings….I have to interject myself during them…. Collaborating and me offering support are not the objective for me attending the meetings….I have success with teachers who want to teach all students, but we meet on the side. Whatever happens in the classroom is worked out between the teacher and me – there is no support or guidance from the principal. All of the inclusive practices and collaboration are not monitored. The principal never asks about how we are planning or collaborating together. She means well, but she doesn't know what collaboration really looks like.

Unfortunately, there appears to be a lack of discussion about collaboration between the principal and teachers. Principal B expressed that she believes the teachers are collaborating, but perhaps she is referring only to the data analysis sessions. For example, she explained, "Initially there was the feeling that I needed to make sure they were collaborating, because of the whole idea of if it's not monitored it won't get done, but now I think it's automatic that it is happening."

*If the special educator doesn't know, we have a problem.* Principal B mentioned that helping teachers figure out how to work with special education students is a key practice she utilizes to promote educators' instruction of students with LD. She commented that walkthroughs that provide an opportunity for her to "keep an eye out for instructional experiences those kids are having" and informal conversations that involve problem-solving and brainstorming about instructional strategies are typical types of support offered to teachers to support their instruction of students, including students with LD. However, when asked about steps she might take to support a teacher's instruction for a student with LD, she replied:

> It depends on if it is a special or regular educator. If it is a regular educator, I would first identify the need, then encourage them to meet with the special educator or specialists and connect them with resources….But if the special education teacher is coming to me telling me I don't know how to help this

> kid, then we really have a problem [laughs], well we do, but they are pretty knowledgeable and usually work it out.

Both teacher informants verified this discrepancy in principal support and conveyed vastly different levels of interaction with Principal B. For example, although the general educator revealed that she typically contacts the special educator if she needs assistance because she is "fabulous and has a lot of knowledge and training," she indicated she would also consider bouncing ideas off of Principal B and noted:

> She does walk throughs at least once a week that are followed up by conversations or notes that are oriented toward instruction. We have lots of opportunities to interact and she is very supportive and open to discussion and will always offer positive praise and a suggestion for a growth, like try this.

On the contrary, the special educator was emotional when talking about her interaction and perceived support from Principal B. She revealed that she would seek out the support of other special educators, select general educators for content questions, or the district special education coordinator for needed instructional support. She explained that although Principal B has an open door policy and is approachable, she rarely interacts with her regarding support for her students with LD. She indicated Principal B rarely completes walkthroughs in her classroom and perceived her as unsure of her role as a special educator:

> I have to initiate everything….I think it's because she isn't sure about what I do in my classroom because she doesn't really come into my room. If she does, she might leave a note, but there aren't suggestions for my instruction. I haven't really learned anything from her about instruction for my students with LD. The only time we really talk about my kids is in an ARD, and sometimes that's too late.

*Summary*

Principal B reported that small group reading instruction is the foundation for meeting the instructional needs of students with LD. She conveyed a limited understanding of instructional

strategies associated with improved outcomes for students with LD, but communicated that students with LD require more individualized attention, motivational strategies, differentiated instruction, and additional resources to be successful learners. Principal B indicated specially designed instructional strategies are a professional expectation and necessary for all students; however, teacher training is needed for successful implementation.

Principal B indicated that instruction for students with LD is very "data driven" and determined by collaborative discussion focused on assessment outcomes rather than a student's "label". She advocated for students with LD to be included in the regular classroom as much as possible and to "not be separated out" when planning for instruction. Principal B explained that she and the faculty have started making the shift in how students with LD are served. In particular, she reported using collaborative dialogue focused on logic and data to encourage all teachers to accept responsibility for including and instructing students with LD. She also indicated she utilizes the instructional support team to facilitate professional development training to develop teachers' knowledge of effective instructional practices for all students and encourages special educators to attend trainings with regular educators. However, although Principal B described an emphasis on collaboration and support of teachers to meet the needs of students with LD, teacher data suggests a discrepancy in perceived principal interaction between regular and special educators (i.e., instructional dialogue, walk throughs), as well as little direction or encouragement of collaborative practices between regular and special educators. Overall, these findings suggest that Principal B utilizes instructional leadership practices for students with LD at a low moderate level as she is in the process of developing her vision and instructional leadership practices for promoting all teachers' instruction of students with LD. Furthermore, her somewhat limited understanding of effective instructional strategies for

students with LD may affect her ability to engage equally in meaningful interaction with all teachers related to the instruction of students with LD.

## *Case Study C*

### *Description of Principal C*

Principal C, a female, has eight years experience as an elementary principal, all of which have been at her current site. She was primarily an elementary educator for 10 years prior to becoming a principal and holds relevant certificates in administration and elementary education. She completed her M.A. in educational administration and reported completing two college-level special education courses that focused on the law and special populations. In addition, she reported attending three district special education-related trainings focused on inclusive practices, testing requirements, and legal issues during the past two years.

### *Understanding and Perceptions of Instruction for Students with LD*

*Focus on extra support and small groups.* Principal C expressed a moderate understanding of effective instructional strategies for students with LD. For example, her conception of instruction that meets the specially designed needs of students with LD during whole group instruction consists of offering extra support, or reteaching:

> They are getting the same instruction that everyone else is getting, but more support – not any less, or any different, except for what they are getting on top of it. They get the same whole group instruction and assignment….the special education teacher….reteaches right there and then….in a different way.

The general educator confirmed Principal C's conception of instruction for students with LD. More specifically, her statement revealed she had minimal responsibility for proactively differentiating content, instructional strategies or assessments for students with LD, rather there

was a focus on "reteaching" or monitoring students with LD. For example, she noted, "There is nothing different about the instruction for students with LD – they are just like everybody else. I haven't had to make different lesson plans for them, but they might need a little extra support."

Following whole group instruction, Principal C also considered instructional grouping formats, such as small, guided groups as a key strategy to providing students with LD extra support. Small, guided groups are an expectation on her campus for reading and math to facilitate instructional differentiation and keep struggling kids more focused and accountable:

> Small groups allow for more differentiation….more practice opportunities and the chance to interact more…. teachers must facilitate discussion by providing ample questioning…. that will keep students more involved in the instruction. I don't think about specific strategies or programs, but just the idea of how important it is to differentiate instruction.

Both teacher informants expressed that inclusive instruction involves whole group instruction followed by guided groups, in addition to reteaching, for any student who needs extra support. Principal C also mentioned that manipulatives, multiple ways for students to respond, computer software, and motivating activities when asked about instructional practices that are effective for students with LD. In addition, she expressed that because all students learn differently, including those with LD, specially designed instructional strategies are important, necessary, and good for all students. However implementation is difficult due to the cost of additional personnel needed to provide extra support.

Principal C advocated for instructing students with LD on the general grade level curriculum to "keep expectations high." Yet, making teachers understand that students with LD must be instructed on grade level and that they must learn to adapt instruction to meet students' needs is a very difficult concept for teachers to understand. The special education teacher

extended this by reporting that Principal C often "pushes" the idea of instructing students with LD on grade level and refers to the task as "hard, but necessary in the best interest of our kids."

*Instructional Leadership Practices for Students with Learning Disabilities*

*Meeting the needs of all students.* Principal C reported placing high priority on meeting the academic and behavioral needs of all students, including those with LD, and indicated assessment data should be used, rather than a student's 'label' to determine academic and behavioral needs. She advocated for a continuum of services, but expressed students with LD should receive the majority of their instruction in the general education classroom whenever possible due to motivational aspects (i.e., working with peers increases a student's motivation to learn), parent anxiety, and negative stigma that may be attached to receiving special education services. However, she also expressed that inclusion may not meet the needs of all students, so it is necessary for some students with LD to be pulled out to receive more individualized instruction in small groups with non-identified peers who have similar instructional needs:

> We have students that we tried to include, but they struggled and you can't modify or adapt enough, so we pull those kids, but we don't call it resource or special ed….they don't know it's special ed. We have kids who come that aren't identified who are just as low….we service all kids depending on their needs.

Principal C also advocated for students with LD to not be 'separated out' when determining supplemental intervention groups to meet the needs of all students more effectively. In other words, students with LD and students who are not identified are placed together in same-ability small groups to receive additional intervention instruction. Ultimately, she considered labels to not be important when determining and meeting the needs of students at her site:

> The special education students are included in groups depending on their needs – wherever they fall. We made a mistake of putting all of the special ed

> kids in one group because it was easier, but you are holding kids back and that just makes no sense whatsoever. There is no reason to put them all in the low group….some kids not identified are lower than them.

*Collaborative responsibility: changing mindsets first.* Principal C advocated for special educators and general educators to work as 'a team' to provide all students, including students with LD, effective instruction. She expressed 'the team' has played a role in the special education students' AYP progress. She also asserted that the foundation for providing effective instruction for students with LD is teachers' attitudes and willingness toward accepting responsibility for instructing all students in their classroom, including students with LD. Principal C reported that she gradually shifted her teachers' mindsets through collaborative dialogue, the regular education teachers in particular. She views maintaining the mindset of working as a team to ensure accountability for all students as one of her most important responsibilities regarding the instruction of students with LD:

> Before the team was not there - they were separate [special educators and general educators]. Now they are seen more as one – the teachers see it that way too. I have continued to sell the idea by reminding teachers that special education kids belong to every teacher….You are responsible and accountable for them and we are all in this together to make sure they grow and achieve. It's just changing mindsets first….a process of changing attitudes…constant and consistent…they are all our students and all our responsibility….It's making sure everyone is clear about what is best for all students and being firm with those that want to keep going back to the old way. We are not there yet, but we have come a long way.

The general education teacher described Principal C's strategies for motivating teachers to work together to meet the needs of all students:

> She motivates us by watching how hard she works…. and her expectations….She believes all students have their own needs and goals and is concerned about all kids and always talks about all kids…. these are all our students and we need to work together and this is what we are charged with.

The special education teacher also confirmed that Principal C's vision for instructing students with LD includes the idea that all students can achieve and that it is the responsibility of all teachers to teach all students, including those with LD. She agreed that Principal C makes it clear to all teachers that they will work together to help all students achieve without having to say, "You will do this! It's more like, this is the way we handle it on our campus, period, in a polite way."

*The principal as collaborator*. Principal C stressed the importance of being available and visible to support all teachers' instruction of all students, including those with LD. Specifically, discussion, open communication, and availability are central to Principal C's conception of offering collaborative instructional support to educators regarding students with LD. Both the general and special educator confirmed that Principal C makes frequent walk throughs (i.e., weekly or bi-weekly) and leaves written notes or they will engage in brief discussions that focus on instruction and usually touch on what Principal C noticed, pointing out positives, brainstorming ideas, figuring out the teacher's support needs, and connecting them to the right resource for support. The general educator added, "I can go to her at anytime to ask her a question about my instruction for my special education students" The special educator described Principal C as very open and available, "The door is always open for communication. We talk a lot about questions or ideas for instruction and she sees me in a classroom almost daily."

Principal C described herself as a member of the team and indicated she often supports teachers and the instructional support team (i.e., specialists, coaches) by collaborating with them at various meetings (i.e., grade level, data analysis and planning, inclusion planning, IMPACT, ARD) and professional development sessions. Principal C considered collaboration of the team as essential to decision-making and planning for instruction for students with LD. Consequently,

she advocated for and attempts to facilitate collaboration among the instructional support team as well as special and general educators by including special educators in all meetings. For example, third through fifth grade general and special educators who work with those grade levels and appropriate instructional support personnel are given two full days off a year to collaboratively analyze benchmark data, form intervention groups, and discuss and plan appropriate interventions for struggling students, including students with LD. She noted also encouraging general and special educators to collaborate at grade level meetings and explained that the meetings allow for learning and dialogue about strategies that will work for struggling students as well as provide a chance to plan together. She stated, "I make sure teachers have the time to meet and plan. I always have a special educator attend the regular education upper grade level meetings." However, teacher informants reported they are not always able to collaborate at grade level meetings because of scheduling conflicts and conveyed that they set up their own consistent weekly after school meeting "on the side" to plan for their inclusion instruction. The special educator stated, "Sometimes she pops in during our meetings. If not, she always asks us about them."

Principal C also expressed facilitating collaboration regarding district professional development training sessions and advocated for special educators to attend the same trainings as general educators to develop similar content knowledge to allow for collaboration regarding instruction for students with LD. The special educator added, "She encourages us to attend all of the same trainings. We are just included as part of the team." Principal C also indicated it is critical for special educators to attend district trainings that focus on strategies for special education students (i.e., reading and behavior management), then present the information to the entire staff. Collaboration regarding in-service trainings was also noted by the principal. She

expressed encouraging the team to collaboratively decide on in-service training topics, present together, and to integrate information regarding instruction for struggling students, including those with LD, into in-service sessions whenever possible. For example, a team of both general and special educators attended an inclusion training, and then collaboratively presented the information they received to the entire team. Furthermore, the special educator stated, "Training sessions cover the needs of all learners because [the principal] stresses the importance of all teachers being able to work with all students because they are included now on a much more frequent basis."

The special educators are my go to people. Although Principal C indicated she attempts to provide personal collaborative interaction and support to all educators on site, she placed a large amount of responsibility on the special educators to provide support to the regular educators for their instruction of students with LD. Both Principal C and the regular educator expressed that the special educators are expected to take the lead in providing support for educators on site regarding effective instruction for students with LD. In other words, if a general educator needs support regarding instruction for a student with LD, they first seek out the professional advice of the special educators and if they approach Principal C for assistance, she directs them to the special educators or specialists for support and makes sure they connect. Principal C commented, "They are expected to help the regular teachers not forget about their included students." She also attributed the special education students' AYP success to the hard work of the special education teachers and has tremendous confidence in the special educators' ability to provide support due to their experience, knowledge about instruction, and their ability to be flexible and available to all teachers.

The general educator confirmed that the special educators are her "go to people" when she needs support for her included students with LD and stated:

> The special educators are very experienced and there is nothing they are not able to tell me. The principal expects them to stay on top of everything and believes they are professional enough to take care of whatever needs to happen for included students, so I often receive information about my included students through the special education team.

Her comments suggest that although Principal C makes it a point to be available to her teachers, general educators may not always communicate directly with her regarding their students with LD due to the special educators acting as a supportive bridge between the two. In fact, Principal C was silent for a moment when asked about her role in supporting teachers' instruction of students with LD and then stated, "I guess just making sure the special education teachers have the necessary background, skills, and training."

Principal C indicated that the special educators are usually able to "figure it out" when students with LD are experiencing difficulties. In fact, the special educator reported that the special educators typically rely on each other as well as key general educators for assistance with grade level content. She also sought the help of the district special education coordinator and Principal C, "The principal is amazing. I can go to her for help and she will offer ideas, but more often she will tell me where to find the answers, so it's really on our shoulders to ultimately find it." Although Principal C expressed that she does not actively seek out information regarding instruction for students with LD on her own due to lack of time. Thus, the special educators are required to independently find their own resources for instructional support for students with LD. The special educator commented, "She is integral to the special education team. She is open to new ideas, trying things, and listening to what we have to say. She does everything she possibly can to provide support. Whatever we ask for, she will listen and try to get it."

*Summary*

Principal C conveyed a moderate understanding of effective instruction for students with LD by specifying some instructional strategies associated with improved outcomes for students with LD (i.e., interactive small groups, more practice opportunities, questioning techniques). She placed emphasis on differentiation during small group instruction and described her conception of specially designed instruction as needed by all students. She also commented that teacher implementation of specially designed instruction is necessary, but may be difficult due to the cost of extra support personnel needed for successful implementation. Principal C also expressed that teaching students with LD on grade level curriculum is a critical component when considering effective instruction for students with LD, but teachers' have difficulty with implementation.

Principal C expressed it is more important to consider a student's assessment outcomes related to academic and behavioral needs, rather than special education "label" when determining services and instruction for students with LD. More specifically, students with LD should not be "separated out" due to their "label". Principal C indicated students with LD should be served in inclusive settings whenever possible due to motivational aspects and possible stigmas associated.

Fundamental to Principal C's instructional leadership for students with LD is promoting the mindset that all teachers must work as a "team" to take responsibility for effectively meeting the needs of all students, including those with LD. Principal C views herself as a member of "the team" and reported making herself available for dialogue with all teachers, consistent observations of instruction, participating in various meetings, and attempting to facilitate on-going collaboration between general and special educators by including special educators in

meetings and professional development trainings. However, Principal C indicated she has an immense amount of confidence in the special educators' ability to problem solve and places the majority of responsibility on them to support the general educators as well as provide specially designed instruction to students with LD. Further, she does not actively seek out information related to instruction for students with LD on her own. Therefore, Principal C's overall instructional leadership practices are developed at a strong, moderate level. Data also suggests the faculty has already begun to make a shift in mindset and is in the process of further developing and maintaining teacher accountability and implementation of effective instruction for students with LD. Perhaps this may be attributed to the equitable interaction and collaborative instructional leadership practices utilized by Principal C to promote educators' instruction of students with LD.

## *Case Study D*

### *Description of Principal D*

Principal D, a female, has been assigned to her current site for the past 16 years serving in different roles. Prior to serving as the principal for the past five years, she was the assistant principal for three years, and a special educator for eight years. She holds certificates in administration, bilingual education, early childhood education, and special education. She completed her M.A. in multi-cultural special education and therefore, combined with her special education certificate, has completed extensive special education-related courses at the college level. In addition, she reported attending two district special education-related trainings focused on inclusive practices and testing requirements.

### *Understanding and Perceptions of Instruction for Students with LD*

*An emphasis on individual needs*. Principal D described effective instruction for students with LD as:

> An emphasis placed on individual needs. It depends on what the child needs to be successful. It should be the case for all, but for special education students it is the law, so they are catered to….Individualizing takes barriers away so children can demonstrate what they are learning. It involves a lot of dialogue about what is best for a child and how they are progressing.

She was able to convey a high understanding of instructional strategies associated with improved outcomes for students with LD including strategies she perceives as effective: same-ability small group instructional formats, reteaching, paraphrasing, scaffolding, explicit modeling, interactive discussion with questioning, breaking down information to control for task difficulty, manipulatives, procedural facilitators, and implementing instructional differentiation, modifications, adaptations, and accommodations. She considered specially designed instruction to be very necessary and beneficial for all students, not just students with LD. However, she expressed that training and a teacher's willingness are key factors to consider regarding teachers' implementation of specially designed instruction:

> I wouldn't expect a new teacher to take it all on. They need to pace themselves and receive training and add a few new strategies each year….But the first thing you need to work on with any teacher is the attitude and open-mindedness because once you have that, the rest can be picked up easily. It's just whether they are willing to serve all kids.

*Instructional Leadership Practices for Students with LD*

*It doesn't matter if they are special ed or not.* Principal D advocated for providing instruction for students with LD primarily in the general education classroom and considers inclusion to be effective because, "Kids are not separated out and there is no stigma attached. They don't realize they are receiving support and parents have peace of mind. Our goal is to do inclusion – not isolate." She also indicated it is necessary to provide a continuum of services to

meet the individual needs of students with LD who do not find success in the general education setting and, if needed, these students as well as non-identified students with similar academic needs are typically pulled out to a different environment and receive 'something more explicit.' Further, Principal D stated:

> When forming supplemental intervention groups, the students with LD are not separated out. All kids' data is looked at to determine needs and they are grouped homogeneously according to need. It doesn't matter if they are special ed or not - all kids are served by all teachers according to their needs.

The special educator also commented that Principal D advocates for students with LD to be in the regular classroom as much as possible, but if a child is not finding success and needs to be pulled out, "She is really supportive of that – she cares less about a homogeneous plan and more about what each child needs."

*Coming to agreements about what is best for kids.* Principal D reported making sure dialogue, regarding what is best for all kids, occurs and is one of her most important responsibilities related to the instruction of students with LD. She indicated utilizing frequent collaborative dialogue and decision-making with staff to develop their willingness to effectively instruct all students, including students with LD. For example, "We are all in agreement that inclusion is the best way to meet all our students' needs." She expressed that involving all staff in the decision-making regarding the education of all students is critical for "making sure all children get an equal chance at success and for fostering the idea that all children belong to everyone." The special educator described how faculty meetings provide an arena for collaborative discussion and decision-making, which often focus on issues regarding the education of all students:

> I think what we are working on now and what we have been working on for the last couple of years is getting everyone to a common viewpoint and a

> common vision for the school. We have discussions at faculty meetings….we are all trying to make agreements about what we think would be best for all kids and if we are all not already doing it, then this is what we would all be willing to do or we will all put it in place for kids to be successful. These things come up and begin with a structured question and the discussion goes from there. For example, as a faculty, what do we want to do to best meet their needs?

Principal D expressed that it is also important for each grade level, in conjunction with a special educator, to collaboratively decide how they will work together to best meet the needs of all students. She commented it is vital that all children are taught by all teachers and that all teachers, particularly at the grade level, meet in order to learn and plan together, share exemplary student work, and offer suggestions and feedback to colleagues. She stated:

> We are fostering the idea that all children belong to everyone. We want teachers to move away from these are my 20 children that I am solely responsible for, so we share all kids at each grade level. For example, with guided reading groups. It's like, these are our children and how do we work together to best meet all of their needs? It's more than just these are my kids and leave me alone. It's not, I am not going to deal with this child. It's more like do you have some strategies that might help me? And how do you think we should do it?

Principal D described how collaborative dialogue and decision-making are also the foundation for district-wide IMPACT meetings held weekly to discuss effective interventions for students who are experiencing academic or behavioral problems. Principal D reported that any teacher may request to meet with the team of professionals (i.e., principal, assistant principal, special educator, general educator, specialists, counselor, nurse, parent) to brainstorm ideas to support a teacher's instruction of a student in order to make the child successful. The special educator added, "All kids are considered for IMPACT meetings. It's when a teacher is looking for advice, additional resources, or strategies to help a kid. We go through all possible ideas and make collaborative decisions after a lot of dialogue."

*She really is an educational leader.* Principal D noted a specific interest in special education and described personal practices aimed at increasing her knowledge of special education topics, such as attending trainings and workshops as well as frequently reading special education and leadership journals with the aim of keeping up to date with current best practices. For example, "I look for articles on my own. It keeps us up-to-date about what research says about best practices and what new strategies might be out there and what the new trends are. Ultimately, the children end up benefiting." Principal D also indicated that it is very important for her to encourage all teachers to engage in on-going collaborative learning about current research to better meet the needs of all students.

Principal D reported taking great personal interest in what is happening in all classrooms and is confident in her ability to support and monitor instruction for students with LD. In fact, although at times it is difficult to complete due to time constraints, she indicated that one of her most important responsibilities regarding instruction for students with LD is reviewing lesson plans and completing frequent walkthroughs in both special and general education classrooms to monitor for grade level content and instructional consistency and effectiveness. She stated:

> I monitor lesson plans as well as do walkthroughs to make sure all students are receiving on grade level curriculum which is individualized to meet their needs and is not watered down. I am familiar with the curriculum so I am better able to have a conversation with a teacher and ask and answer questions about instruction with the teachers. The overall purpose is to make sure all children are receiving the same curriculum and effective instruction.

Both teacher informants confirmed that Principal D completes frequent walk throughs in their classrooms (i.e., weekly or bi-weekly) and agreed they often approached the principal for support and advice due to her understanding of instruction. The special educator stated:

> She really is an educational leader, not just the administrator. I think she knows more about special education than I do. She knows a whole lot and is

> really smart and takes the time to find out what she doesn't know. I don't know when she sleeps because she reads some of everything.

Due to Principal D's availability and open door policy, both teacher informants agreed they engage in informal collaborative conversations with the principal in the hallway, after walk throughs, or they make an appointment with her. Principal D indicated that collaborative dialogue following walk throughs focuses on reinforcing positive strategies teachers are implementing, making suggestions or providing examples of instructional strategies that may be beneficial and promoting reflection. Further, the special educator stated:

> We [the principal and I] always brainstorm together about instruction and I talk with her because if a child is not doing well, it's a community problem. We also talk about ways to improve instruction, materials, or training that might be needed. After walkthroughs, we talk and reflect about what she saw. It's always positive or a concern about something she noticed….Sometimes she will give me strategies to try.

The general educator commented,

> She will make time to talk about whatever you need. Sometimes she will leave notes that focus on positives or offer suggestions after she comes into my room. She tends to be very positive. Things can be stressful, but to feel like I have someone to go to no matter what to help with issues or decisions or instruction for my biggest strugglers makes it very nice.

*Community network: very few decisions are made in isolation.* Principal D indicated she collaborates with a large instructional support network or cabinet (i.e., assistant principal, district special education coordinator, instructional coaches, specialists, and facilitators) on site to support teachers' instruction of all students, including students with LD. For example, Principal D noted that the cabinet members have various collaborative responsibilities such as, completing walk throughs, engaging in supportive dialogue related to instruction, facilitating in-service trainings for teachers, attending IMPACT, grade level, and faculty meetings, and coordinating intervention services for struggling students. The principal stated:

> I brainstorm a lot with the cabinet, especially the special education coordinator. I make very few decisions regarding instruction for students with LD in isolation. I always seek someone else's opinion. If a teacher comes to me for support, I would listen to their needs and invite someone in to help figure out ideas, solutions, and resources.

Both the general and special educator reported they seek each other out if they have concerns regarding a student with LD or if they need support for instruction. However, they also mentioned frequent collaboration with members of the instructional support team (i.e., assistant principal, specialists, facilitators, coaches) related to instruction for students with LD or training opportunities.

Principal D expressed that she also collaborates frequently with both regular and special educators individually and during their meetings (i.e., grade level, ARD, special education team, IMPACT) and encourages dialogue and collaboration between special and general educators to promote shared decision-making regarding the instruction of all students, including students with LD. She commented, "I want the special educators to feel like they are included and part of the team." For example, special educators attend all trainings with the grade level of general educators they are working with so they are on the same page regarding curriculum content. Special educators are also included in monthly half-day planning sessions with the grade level, data analysis and intervention planning meetings, as well as after school grade level meetings. However, the general educator indicated that the special educator is not always able to attend grade level meetings because of scheduling conflicts and lack of formal organization:

> It happens to a degree and we keep getting better at it, but I don't know if it is formally there yet. It is definitely a challenge. The special educator is willing to come to meetings and help us plan, but I usually have to meet with her informally on the side. It's something I would like to do more of. Most of it is on our own doing….We touch base a lot and sit down and talk once a week informally. It would be nice to have a formal meeting, say 30 minutes once a

> week one on one. We just need to figure the scheduling out and make a commitment.

*Summary*

Principal D expressed a high understanding of effective instructional strategies for students with LD by specifying several strategies that are associated with positive outcomes for students with LD. She described specially designed instruction as necessary and beneficial for all students; however, the key to consistent implementation depends on teacher training and willingness to serve all students. Principal D advocated for students with LD to receive instruction in an inclusive environment with peers or not be "isolated" or "separated out" to the greatest extent possible due to possible negative stigma attached. She indicated instruction for students with LD should be determined by data, based on individual needs, and focused on grade level content.

Principal D advocated for collaborative dialogue and decision making between faculty members regarding how to best meet the needs of all students to promote collaborative accountability for the academic achievement of all students, including students with LD. Further, in addition to already completing her M.A. in special education, the principal described a high interest in increasing her own knowledge of special education instruction and leadership practices and indicated she is confident engaging in practices such as frequent walk throughs, monitoring lesson plans, collaborating at meetings, and dialogue focused on instruction for students with LD to support and monitor all teachers' instruction of students with LD. She also reported promoting and participating in a collaborative instructional support network on a campus whose aim is to assist all teachers' instruction of all students, including those with LD.

Principal D's encouragement of collaborative dialogue and decision-making among faculty regarding the instruction of students with LD as well as her knowledge and ability to

support teachers' instruction of students with LD appear to contribute to a more equitable support network for all educators. Furthermore, teachers perceive her as an educational leader due to her high knowledge of special education practices and her interest in improving her own knowledge level of best practices for all students, including those with LD. Overall, an accountable and collaborative mindset among the faculty regarding the instruction of students with LD appears to be more developed as a result of Principal D's understanding of effective instruction for students with LD and her highly developed instructional leadership practices utilized to support all educators' instruction of students with LD.

## *Case Study E*

### *Description of Principal E*

Principal E, a female, has been an elementary principal for the past 12 years, all of which have been at her current site. Prior to serving as a principal, she was a secondary special educator for 15 years. She holds certificates in administration, and a dual certificate in special and general education. She completed her M.A. in special education and therefore, combined with her special education certificate, has completed extensive special education-related courses at the college level. In addition, she reported attending several district special education-related trainings focused on inclusive practices, legal issues, differentiated instruction, the referral process, instructional settings, and testing requirements. Also, it is important to note that Principal E's site is a designated Reading First school.

### *Understanding and Perceptions of Instruction for Students with LD*

*A label is not going to make me do something different.* Principal E described her understanding of effective instructional strategies for students with LD as strategies that may be effective for any struggling student – it depends on their needs:

> I almost don't even see it as an LD thing….I think a lot if just comes from what are best practices for struggling learners in general….giving them a label is not going to make me do something different….There are some things that need to be done differently, but that's for all kids that struggle…it's how do we modify strategies to meet each kid on an individual basis. It's taking a lesson and figuring out how to differentiate for all kids.

She perceived specially designed instructional practices as necessary for any child that demonstrates a need (i.e., for prevention), not just those with LD. However, implementation may be feasible as long as relevant training for teachers is provided. Principal E indicated that research-based strategies are required to ensure students are receiving the most effective educational practices. She conveyed a high understanding of instructional strategies associated with improved outcomes for students with LD by specifying instructional strategies she perceived to be effective for all students, particularly those with LD, such as: (a) explicit modeling including think alouds, (b) peer tutoring, (c) small group instructional formats, (d) multiple practice opportunities, (e) intensive pacing for instruction, (f) procedural facilitators, (g) chunking and scaffolding for control of task difficulty, and (h) interactive discussion with ample questioning. She also noted that a teacher must, "work with kids on their specific needs and switch up strategies if a student is not showing progress."

Principal E expressed that a key consideration regarding instruction for students with LD is making sure they are accessing the general curriculum, for example:

> The most important thing regarding instruction is we have to make sure it is aligned. It can't be some separate thing off for the LD crew. There might be some modifications, but it has to be the same rigorous content, not something that is too watered down. They have to be able to access the curriculum and

> we have to keep the same expectations to follow the text, but how do you modify it?

The special educator added, "We do the very same things they are doing in the general education when students come to my room. We may approach it a little differently, but the content is the same and the expectations are just as high."

*Instructional Leadership Practices for Students with LD*

*I can't use a label to separate them out.* Principal E reported students with LD receive instruction in pull-out and inclusive settings, with inclusion being the larger piece including delivery of instruction from regular educators. She expressed this model is effective because children are unaware of receiving special education services and they have the opportunity to learn with their peers. She placed an emphasis on using diagnostic assessments to determine a student's academic needs to plan for appropriate instruction as well as homogeneous same-ability small group instructional formats:

> One of the biggest pieces with instruction for our struggling kids is diagnosing – where do I begin my instruction? You have to be able to articulate their needs clearly and identify their foundational weaknesses in order to plan for their instruction and how they might be grouped for it with other kids with similar needs who might be identified or not….I can't use a label to separate them out and I have to pinpoint their needs first.

Both teacher informants elaborated that the process for determining and delivering instruction to students with LD begins with collaborative discussion by the instructional support team (i.e., principal, instructional coach, specialists, special and general educators) that includes analyzing diagnostic data to establish the most appropriate setting, groups, and instructional strategies. The special educator described how she provides instruction to students with LD as well as non-identified students:

> We always begin by looking at data to figure out what the students need….We do more of a co-teaching model in the classroom, but I also pull groups with non-identified classmates who need more practice and support.

*We educate every child every day.* Principal E advocated for teachers to have high expectations for all students, including students with LD, by encouraging teachers to 'not know the label' of a student. She reported utilizing collaborative dialogue to reach consensus with staff related to promoting high expectations for all students and data as a rationale:

> Teachers are on board with the idea that what matters most is getting kids the support they need. We talked about it and looked at data and they realized this kid is really no different from my special ed kids and some of the special ed kids have more skills than non-identified kids, so the label doesn't matter, it's just getting kids the help they need. It helps them a lot to see that the label doesn't truly define a child. It has come over time, just taking ownership for all kids and their needs. It's just having high expectations for all and doing what's best for all kids. That is a big philosophy across our campus and with it there is no line anymore because they are all of our children first, so we will do this because we want the best for all of our children, so we educate every child every day – that's our mantra.

She elaborated about this philosophy by mentioning that educators on campus are aware of her special education background and vision for meeting the needs of all students:

> Teachers know how I feel about giving all kids the support they need - It motivates them to do it, especially with the way I feel about our neediest kids. They know I am not going to let anyone mistreat kids and I understand special education and what is going on – they know it.

Both teacher informants perceived the principal as setting very high expectations for the instruction of all students, including students with LD, and indicated she constantly motivates them to meet the needs of all students. The special educator elaborated:

> She really encourages us to help all kids reach their potential. She says we really can get the best out of them by having high expectations all of the time and expect they will achieve….She does not want a stigma attached to receiving services and encourages us not to put a label on someone, but just look at them as a kid and think about what we can do to support them and help them achieve expectations.

*Collaboration is key: you can't work in isolation.* Principal E expressed that she considers staff collaboration as instrumental in the growth and achievement of the special education subgroup during state accountability tests (i.e., AYP) as well as making sure teachers understand the vision for collaboration, she stated:

> A major point is making sure the vision is understood, that we are going to be working together and really letting the regular ed teachers know that with the special educator, you all are going to be working together as a team. You can't work in isolation when it comes to working with our kids who need us the most. I constantly encourage them to collaborate together. They are very motivated when they see how I give them a lot of support for things if they are collaborating.

The principal also asserted that the special and regular educators have great rapport and respect for each other and the special educator is seen as a member of the team. In fact, making sure teachers are able to collaborate is a key practice utilized by the principal to promote the instruction of students with LD, she expressed:

> I have to make sure their planning times are conducive to one another to meet. If I don't, how do I know they are going to be able to consistently meet? I want to make them available to each other, not make it an obstacle, like, you are a team but you are going to have to hope you can figure out a time to meet. No! That's not right – no one else has to do that, so you want to make sure the time is actually put in place to do that.

Both teacher informants confirmed that they work closely together to plan and deliver instruction for struggling students, including those with LD. The special educator noted, "I attend special education planning meetings as well as grade level meetings where we plan together. The grade levels tailor their planning times to accommodate us. The principal is typically at our meetings as well."

Principal E also considered the instructional support team (i.e., instructional coach, reading coach, specialists, facilitators) as vital collaborators and the main support network for all

educators. Principal E described herself as a member of the support team and elaborated on the practices utilized by the team to promote teachers' instruction of all students, including those with LD. For example, the team meets regularly to decide and coordinate the support needed by teachers to effectively instruct their students, such as analyzing assessment data, forming intervention groups, completing walk throughs and observations, engaging in dialogue regarding instruction, attending grade level meetings, and facilitating and providing trainings based on results of the aforementioned practices. Both teacher informants articulated that the support network is always available to offer ideas, training, and resources that will benefit their instruction for all students. Also, both teacher informants indicated receiving valuable support and training from the support team.

Finally, Principal E as well as both teacher informants described a heavy emphasis placed on collaborative professional development training (i.e., in-service and district trainings) as a practice to promote teachers' instruction of students with LD. For example, special educators typically attend the same district and in-service trainings with general educators to increase their understanding of grade level curriculum as well as effective instructional practices. The Principal explained:

> Teachers need to learn side-by-side. The special educators need to hear it the same way as the regular ed teachers because that's who they are going to work with when they come back and support those kids….If we get funding for a new program or curriculum, we do not leave out the special ed teachers. All students have the opportunity to use that resource if it's good for them.

The special educators are often encouraged to attend district special education trainings and present the information to the entire staff. The special educator noted, "Our special ed team presented on modifications and accommodations and academic and behavioral supports to the staff." Principal E commented, "The special ed team presents to the regular ed

teachers….modification training is needed for GE teachers too and it resulted in, if this can work for special ed kids, it can work for anyone." She also added how she and the staff collaboratively focus on differentiation strategies during in-service trainings:

> I have to make sure teachers can differentiate if I am going to expect them to do it….I or other teachers model it….take a lesson and show them how to differentiate, including the assessment….Some teachers differentiate and don't even know it – it's getting them to recognize what they are doing and then teach others….Teachers present on what they are doing for especially our neediest.

Both teacher informants reported they perceive Principal E as constantly encouraging professional development to increase their knowledge regarding effective instruction for all students. The general educator explained, "She always encourages us to get as much training as we want or need from wherever if it meant we would be able to instruct them [all students, including those with LD] better." The special educator noted, "She supports and encourages whatever growth and knowledge you want to take on and support to where to get it. She leads by example in that way. She is always reading and looking for new information about the best ways to teach our kids."

*I want to be ready to offer the support they need.* Principal E reported she implements a variety of practices to promote all teachers' instruction of students with LD, such as walk throughs, informal collaborative discussions centered on instruction, monitoring lesson plans, and professional development training. Principal E perceives teachers as being comfortable to approach her for instructional support due to her willingness to support the entire faculty and her knowledge of special education:

> I offer all teachers the same type of support opportunities. No one is going to be left out of being able to get support or resources. All teachers will say they know my special ed background and knowledge and know I am here for

> support and will come directly to me and I want to be ready to offer the support they need.

Teacher informants perceived Principal E as highly supportive, knowledgeable, and approachable. The general educator noted, "She has an open door policy. We always brainstorm about how to improve strategies for all of my students. I know she has the knowledge about how to teach all of them, meaning my included kids too. The special educator also expressed:

> Whatever support I need is always supported by her. I have every opportunity to communicate with her. She always gives suggestions for instruction because she was a special education teacher before and that's ideal. It doesn't get any better than that….Any support provided to general ed kids is always provided for mine.

Principal E further explained that critical practices utilized to support teachers' instruction of students with LD are the completion of walk throughs and informal discussions in both general and special education classrooms to ensure teachers are differentiating instruction for all students and allowing students with LD to access the general curriculum. Both teacher informants reported frequent walk throughs are completed (i.e., bi-weekly) as well as collaborative dialogues that focus on instruction. Principal E described a typical walk through and follow up conversation:

> Walk throughs are very effective for monitoring instruction so I know what kind of instruction the LD crew is getting and for understanding the support teachers need….I give very specific feedback….Let's brainstorm together to improve things, like maybe more scaffolding…. I also need to make sure they are aware of resource and support opportunities.

Principal E also reported monitoring lesson plans with close attention given to small group instructional formats and differentiation strategies as practices utilized to support teachers' instruction of students with LD, for example:

> I monitor the teachers' lesson plans a lot…. I want to see how they are going to differentiate and who it is for. Sometimes it's for the LD crew and

> sometimes it's not. Am I seeing the same names every week with the same differentiation strategies? Groups and strategies better switch up based on student's needs, not just the same thing every week….not just cookie-cutter strategies.

*Open-dialogue: Let them cross the line.* Principal E described open-communication that allows teachers to "cross the line" (i.e., experiment with new ideas or strategies) as a key practice utilized to promote the instruction of students with LD. She mentioned that because of her open door policy and encouragement of "doing something different if it's what's right for kids," teachers often approach her about experimenting with new ideas and making changes:

> I think teachers want to do neat things, but it's like, this money is supposed to be for this, or this teacher can't teach the special ed kids, but that's nonsense….I like to give teachers permission to make bold changes. I offer open-dialogue to them and we agree to just cross the line because no one is going to ask and it's what's best for kids. We crossed the line a lot, but you have to give teachers permission to do that if it's going to be effective for the neediest kids…. It allows innovative things to happen….You have to let teachers take risks.

Teacher informants perceived Principal E as open to new ideas and making changes, if it shows promise for benefiting students. The general educator commented:

> The great thing about working with her is her flexibility and open-mindedness. I know I can go to her with ideas and she will consider them, if it's about kids… she encourages us to try different ways to meet all of our kids needs.

The special educator also indicated this sense of innovativeness and noted:

> She always says do what you need to do. She really tries to empower us by letting us make changes…. She really wants us to keep trying to find out what works for our kids. That means switching things up if needed. She really tries to empower us like that – that's her philosophy.

*Summary*

Principal E articulated a high understanding of instructional strategies associated with improved outcomes for students with LD by identifying several effective strategies (i.e., explicit

modeling, small group and peer formats, procedural facilitators, scaffolding to control for task difficulty). She asserted that specially designed instruction and rigorous grade level curriculum modified to meet students' needs are essential to the academic success of all students, including students with LD. She perceived specially designed instruction as effective and necessary for any student depending on their needs, not just students with LD, and indicated that training is necessary for feasible teacher implementation.

Principal E advocated for a continuum of services to meet the needs of students with LD and emphasized inclusive education to avoid stigma of special education services. She encouraged staff to "not know the label" of a child when determining services and instruction for students with LD. Specifically, she expressed services and instructional strategies for all students, including those with LD, should be based largely on collaborative discussion that centers on data analysis to pinpoint all students' individual needs. Principal E advocated for high expectations for all students, collaboration and communication between and directly with all staff members, allowing teachers to take innovative risks if it benefited students, and equitable administrative interaction for all teachers through a variety of support practices such as frequent walk throughs, collaborative dialogue focused on instruction, monitoring lesson plans for differentiation, and professional development opportunities. Teachers perceived Principal E as an educational leader due to her high level of knowledge regarding special education instruction as well as "leading by example" in terms of continuously developing her own understanding of effective instructional practices for all students, including students with LD.

Principal E's high understanding of effective instruction for students with LD appears to influence and facilitate direction to teachers regarding instruction for students with LD. She seemed to convey a clear "vision" for providing equitable interaction, support, and opportunities

for all teachers and students on campus, including students with LD. Overall, information gleaned from Principal E and teacher informants suggests highly developed instructional leadership practices utilized to promote educators' instruction of students with LD, including a more developed collaborative mindset among staff towards accepting the responsibility of meeting the individualized needs of all students, including those with LD.

## *Cross-Case Analysis*

In the previous section I presented data related to the findings of each principal's within case analysis. I described each principal's understanding and perceptions of instructional practices associated with improved outcomes for students with LD, as well as their instructional leadership practices utilized to promote teachers' instruction of students with LD. Additionally, teacher data was used to refute, confirm, or extend data collected during principal interviews. In this section, I will highlight common themes found after completing the cross-analysis of principal cases. Topics were categorized into nine themes to assist in management and organization of the data: four themes regarding principals' understanding and perceptions of instructional strategies associated with improved outcomes for students with LD (high understanding for principals with special education background, small groups facilitate specially designed instruction, accessing the curriculum is critical, specially designed instruction is necessary and benefits all students) and five themes related to their instructional leadership practices utilized to promote teachers' instruction of students with LD (using data to determine instructional needs, promoting a collaborative mindset, developing collaborative practices between all educators, equitable principal support and interaction, special education leaders).

*Understanding and Perceptions of Effective Instruction for Students with LD*

The first and second research questions in this study are, "What instructional practices do principals identify as associated with improved academic outcomes for students with LD? and How necessary and feasible do they perceive these practices for students with LD?" My hypothesis regarding principals' understanding and perceptions of effective practices for students with LD is that principals with more special education training may have a higher understanding of practices and more positive perceptions towards the necessity and feasibility of their implementation.

*High understanding with more special education training.* The majority of principals in this study (n = 4) conveyed at least a moderate level of understanding. More specifically, principal participants expressed varied levels of understanding regarding instructional strategies associated with improved outcomes for students with LD. For example, Principal B conveyed a limited understanding, Principal C communicated a moderate understanding, and Principals A, D, and E articulated a high level of understanding by specifically identifying several instructional strategies associated with improved outcomes for students with LD (e.g., explicit modeling, procedural facilitators, effective questioning, scaffolding and sequencing for control of task difficulty, small group formats). It is interesting to note that according to descriptive data obtained from participants, both Principals D and E were former special educators and completed their Master's in special education. Although Principal A did not have specific special education training, his experiences as a former bilingual educator and instructional coach may have influenced his ability to make vital connections between instructional methodology for students with LD and ELLs.

*Small groups facilitate differentiated instruction*. All principal participants (n = 5) expressed that homogenous skill-leveled small group instructional formats are a key component

for effectively instructing struggling students, including those with LD. More specifically, the principals indicated that small group instructional formats facilitate the implementation of specially designed instructional practices (i.e., differentiated, intensive, adapted, strategies) to meet the individualized needs of struggling students, including those with LD, for various reasons including: (a) more individualized support and monitoring by the special education teacher, (b) increased opportunity for interaction and questioning, (c) more opportunities for reteaching skills in a "different way", (d) more scaffolding opportunities, and (e) increased practice opportunities.

*Accessing the general curriculum is critical.* An important theme that surfaced during interviews was the ability of students with LD to access the general curriculum. In fact, all principals (n = 5) reported a vital awareness of the importance of instruction that allows students with LD to access the grade level general curriculum. Principals indicated that "academic rigor" and "high expectations" were benefits associated with the ability of students with LD to access the core curriculum. However, it is important to note that only Principals C, D, and E discussed this topic at length and prioritized it as one of the most important details regarding instruction for students with LD. These three principals expressed a general understanding of the importance of making sure teachers were aligning academic content and instructing students with LD on the general grade level curriculum while differentiating, adapting, or modifying instruction to meet the individualized needs of students with LD thus promoting their academic achievement.

*Specially designed practices are necessary for all.* All principal participants (n = 5) perceived specially designed instructional practices as beneficial for the academic achievement and progress of all students, not only students with LD. Further, all participants expressed that these strategies were a necessary expectation by teachers for any student who needs extra support

or “something different” to meet academic needs as well as for preventing further academic difficulty. Regarding feasibility, Principals A and C perceived specially designed instructional practices as somewhat unfeasible. For instance, both principals indicated implementation is difficult due to teacher understanding and the extra personnel resources and time required. Principal A also mentioned that it is not “realistic” to implement specific, specially designed practices for individual students. On the other hand, Principals B, D, and E expressed more positive perceptions regarding feasibility and indicated implementation is feasible if effective training related to specially designed practices is provided to teachers. Principal D also cited a teacher’s willingness to teach all students as a critical factor for influencing feasibility.

The third research question in this study is, “What instructional leadership practices do principals utilize to promote educators’ instruction of students with learning disabilities? My hypothesis regarding implementation of instructional leadership practices for students with LD is that principals with higher understanding and more positive perceptions towards implementing effective specially designed practices for students with LD will have more overall highly developed instructional leadership practices to promote educators’ instruction of students with LD.

*Using data to determine instructional needs.* Principals B, C, D, and E expressed that using screening assessment data rather than focusing on a student’s LD “label” is critical for determining appropriate setting for delivery of instruction, intervention groups, and instruction. These principals promoted the inclusion of students with LD in general education classrooms, but stressed the importance of using data to determine the most appropriate setting on the continuum of services. For example, principals noted that ideally, students with LD should receive instruction in the general education classroom with their peers; however, sometimes a

student's needs are greater than support available in the general education classroom, thus requiring a more intensive instructional delivery setting such as the resource room. It is important to note that these principals also indicated that non-identified students with similar academic skills may also receive instruction in the resource room alongside students with LD, thus promoting the idea that all students are eligible for inclusive services based on their academic needs, not their "label".

Principals B, C, D, and E also reported not "separating out" students with LD when planning and forming supplemental intervention groups during collaborative data analysis meetings. In other words, students with LD are placed in intervention groups with non-identified peers who are found to have similar instructional needs based on assessment data. Principals expressed that part of the rationale for not excluding students with LD from intervention groups is that students with LD do not always have the lowest academic performance outcomes (e.g., non-identified students may have lower academic skills), so it does not make sense to automatically assign students with LD to the lowest performing skills group or to exclude them entirely.

*Promoting a collaborative mindset of accountability and high expectations.* Principals B, C, D, and E described how they are striving to develop a collaborative mindset or direction among all teachers that promotes accountability and high expectations for the inclusion and instruction of all students, including students with LD. More specifically, these principals indicated they are working to foster the idea that all teachers are responsible for the education of all students and that teachers must collaborate to effectively teach all students. As one principal stated, "We are all in this together to make sure they [students with LD] grow and achieve." Principals described engaging in collaborative dialogue with teachers that focuses on rationale,

logic, data, and a "vision" to promote and develop a collaborative mindset among all teachers for accepting the responsibility of teaching all students, including those with LD. It is important to note that data suggests Principal B is in the beginning stages of developing a collaborative mindset among staff, Principal C seems to be developing and working to maintain the mindset, while both Principals D and E appear to have a well-established collaborative mindset among educators at their sites. This theme is significant as data suggests that a more developed collaborative mindset among staff is commensurate with more developed instructional leadership practices for students with LD.

*Developing collaborative practices among all educators*. Principals B, C, D, and E also appeared to be in varied stages of developing and implementing collaborative practices among staff to promote their instruction of students with LD. More specifically, principals reported utilizing practices to facilitate collaboration between general and special educators as well as among the instructional support team. For example, Principals B, C, D, and E indicated they are promoting collaborative data analysis meetings where general and special educators as well as members of the instructional support team engage in collaborative dialogue when analyzing assessment data to determine instructional delivery and intervention groups for students with LD. Principals B, C, D, and E also expressed promoting special and general educators to attend the majority of district professional development trainings together as well as a collaborative responsibility among staff to provide in-service trainings on campus. In addition, Principals C, D, and E encouraged special educators to present information gathered during district special education trainings to the staff that focus on topics related to instruction of students with LD.

Principals C, D, and E also encouraged collaboration of general and special educators at grade level meetings and monthly planning sessions; however, only Principal E noted that time

was intentionally put in place to make sure general and special educators were available to collaborate on a weekly basis. Indeed, an interesting related finding was that the majority of teacher informants indicated they are not able to meet due to time conflicts. Consequently, they were forced to meet individually "on the side" to plan for inclusive instruction of students with LD. Finally, only Principals D and E communicated that a collaborative network, or the instructional support team, actively assisted both general and special educators.

*Equitable principal interaction and support.* An important theme that emerged due to teacher informant data was inequitable principal interaction and support for all teachers' who instruct students with LD. Interestingly, all principals (n=5) reported engaging in interactive collaborative practices with teachers such as walk throughs and informal dialogue that focused on instruction and connecting teachers with resources and training needed to promote instruction of students with LD. However, according to teacher data, Principals A and B were perceived as frequently interacting and supporting general educators, but only minimally, if at all, with special educators.

On the contrary, Principals C, D, and E were reported by teachers to demonstrate high levels of collaborative interaction (i.e., walk throughs, feedback, attending meetings and professional development) and support for promoting the instruction of students with LD with both general and special educators. Both general and special educators perceived them as extremely available for communication regarding their instruction of students with LD. Their equitable support for special educators suggests they viewed the special educators as an integral component of the general education instructional program as well. However, only Principals D and E expressed actively monitoring the instruction of students with LD by reviewing lesson plans for specially designed instructional practices and grade level curriculum.

*Special education leaders.* Principals A, B, and C specifically noted that the special educators are expected to "take the lead" when it came to the instruction of students with LD. For example, these principals perceived the special educators as "experts" who are expected to "figure out" answers to instructional issues. Interestingly, Principals B and C communicated the lowest understanding of instructional practices associated with improved outcomes for students with LD (i.e., limited and moderate understanding). This may suggest that a lower understanding may affect a principal's ability to confidently promote special educators' instruction of students with LD. It is also important to note that although Principal C indicated frequent interaction with special educators, she openly expressed her limited desire to increase her own knowledge of best practices for students with LD. Further, the special educator at her site commented, "Ultimately, we find our own answers."

Conversely, Principals D and E expressed that they collaboratively "figured out" how to best instruct students with LD with the special educators. Indeed, teachers perceived Principals D and E as highly knowledgeable regarding special education instruction and eagerly pursued their specific feedback and suggestions regarding instruction for students with LD. In addition, Principals D and E were perceived as educational leaders who were interested in increasing their own knowledge regarding best practices for all students, including those with LD, to better support their teachers' instruction in hopes of increasing students' academic outcomes.

### *Cross Case Analysis Summary*

As may be expected, principal participants articulated varied levels of understanding regarding instructional practices associated with improved outcomes for students with LD. However, all principals expressed that small group formats are essential for delivering specially

designed instruction to students with LD and indicated an awareness of ensuring students with LD are receiving instruction on grade level curriculum. Interestingly, two of the three principals who conveyed a high understanding of effective instruction for students with LD are former special educators and possess a Master's in special education. This may suggest that more direct experience and training related to special education influences a principal's understanding of effective instruction for students with LD. Finally, all principals perceived specially designed instruction for students with LD as necessary for all students, not just those with LD; however, varied perceptions of feasibility were reported. Two of the three principals who perceived specially designed instruction as more feasible, also had more special education training. Again, this suggests that a principal's level of special education training may positively affect their perceptions of specially designed instructional practices for students with LD.

Principals also communicated different levels of utilizing instructional leadership practices to promote educators' instruction of students with LD, but also agreed on some practices. For example, the majority (n=4) of principals indicated using data rather than a student's LD "label" to determine instructional delivery and not "separating out" students with LD when creating intervention groups. In addition, developing an accountable, collaborative mindset or "vision" that includes collaborative practices among educators for instructing students with LD as well as equitable principal interaction were also critical instructional leadership practices reported by principals. However, principals who were not determined to demonstrate high levels of instructional leadership practices for students with LD viewed the special educator as responsible for taking the lead and as an "expert" regarding the instruction of students with LD.

Interestingly, the two principals with an M.A. in special education who demonstrated higher understanding of effective instruction for students with LD also appeared to have the most overall developed instructional leadership practices for students with LD, including the most developed mindset among staff for the collaborative responsibility of teaching all students. Furthermore, they were the only principals perceived by teachers as educational leaders who are highly knowledgeable of special education instructional practices. This appears to suggest that a principal's level of understanding and more positive perceptions regarding effective instruction for students with LD may manifest in their ability to utilize and confidently engage in instructional leadership practices to promote the instruction of students with LD. Interestingly, although an additional principal also expressed a high understanding of instructional practices, data suggests his collaborative mindset or "vision" for the responsibility of teaching all students as well as the principal's instructional leadership practices for promoting educators' instruction of students with LD were the least developed. This additional finding may suggest that a principal's desire or prioritization of developing a collaborative accountable mindset among staff regarding the instruction of students with LD may be the foundation for building instructional leadership practices for promoting educators' instruction of students with LD (see Table 8 for a summary of key findings across participants and Table 9 for a summary of instructional leadership key findings across participants).

# Chapter 5

## Discussion

Chapter 5 begins with a brief discussion of the summary of findings as they relate to the three research questions. Next, the overall conclusions of this study and their implications for future research in the field will be presented. Finally, the limitations of the study are addressed.

School reforms and recent federal policies have placed emphasis on the instructional leadership role of elementary principals regarding the instruction of students with LD (IDEA, 2004; NCLB, 2001). However, there is a dearth of research describing elementary principals' understanding and perceptions of effective instruction for students with LD. Yet very few studies have investigated the instructional leadership practices implemented to facilitate effective instruction for students with LD. Therefore, this multiple-case study design explores the extent to which elementary principals understand and perceive effective instructional practices for students with LD as well as the instructional leadership practices they utilized to promote educators' instruction of students with LD. The multiple-case study included five instructional leaders purposely selected based on their perceived and demonstrated effectiveness as special education leaders.

### *Discussion of Findings*

#### *Understanding Effective Instruction for Students with LD*

Results from this study provide insights into elementary principals' understanding of effective instruction for students with LD. The five principals expressed varied levels (i.e., low, moderate, high) of understanding regarding effective instruction for students with LD. A noteworthy finding is that the majority of principals (n=4) in this study communicated at least a

moderate understanding of effective instruction for students with LD by identifying several practices associated with improved outcomes for students with LD. This differs from previous studies, which have shown that principals have limited knowledge regarding the instruction of students with disabilities and feel poorly prepared to be special education leaders (DiPaola & Walther-Thomas, 2003; Wakeman et al., 2006). However, it is important to note that these principals were purposely selected due to their perceived and demonstrated special education leadership.

All the principals articulated that small group formats are an expectation for instructing students with LD. They also noted the strong potential impact small group formats have for facilitating the implementation of specially designed instructional practices to meet the individual needs of learners. Indeed, research has established that instructing students in small, interactive groups contributes significantly to the effect of an intervention (Elbaum et al., 1999; Swanson, 1999; Vaughn et al., 2000). This finding is hopeful in light of research demonstrating undifferentiated, whole-group instruction is typically the norm in both general and special education classrooms (Moody et al., 2000; Scott et al., 1998); as well as studies that show instructional leaders have the ability to influence teacher's classroom instruction and indirectly affect student outcomes (Hallinger & Heck, 1996; Marks & Printy, 2003; Meek, 2000; Quinn, 2002). Further, all principals reported an awareness of ensuring students with LD receive instruction on the general curriculum and the majority (n=3) indicated this is one of their most important responsibilities regarding the instruction of students with LD. This finding is consistent with previous research of middle school principals who overwhelmingly agreed that students with disabilities should have access to the general curriculum (Wakeman et al., 2006). Perhaps this is due to increased accountability standards imposed by recent legislation requiring

that most students are granted access to and master the general education curriculum to the greatest extent possible (IDEA, 2004; NCLB, 2001). Finally, as hypothesized, special education training appeared to influence a principal's level of understanding as two of the three principals who articulated a high understanding completed advanced degrees in special education. This will be discussed further in the overall conclusions of this study.

*Perceptions of Specially Designed Instruction*

The second research question sought to explore principals' perceptions of the necessity and feasibility of implementing specially designed instruction for students with LD. Although all the principals indicated they perceived implementation as necessary for all students requiring it, not just students with LD, they differed in their perceptions of feasibility. For instance, two of the principals noted that implementation is difficult, challenging, or "unrealistic" due to limited personnel, time, and teacher understanding. Special and general educators have also reported that lack of time and training inhibits their ability to implement specially designed instructional practices (Crockett, 2004; Scott et al., 1998; Scruggs & Mastropieri, 1996). However, three of the principals expressed more optimism by commenting that implementation is possible with relevant teacher training. Finally, as hypothesized, special education training may have impacted perceptions as two of the three principals who reported more positive perceptions had more special education preparation.

*Instructional leadership practices to promote instruction of students with LD*

The final research question explored instructional leadership practices utilized by elementary principals to promote educators' instruction of students with LD. Principals were found to describe different overall levels (i.e., low, moderate, high) of implementation of instructional leadership practices for students with LD. For example, principals indicated the

importance of using data to determine student's instructional needs, including service delivery and intervention placement. This is an important finding. Rather than relying on a student's "label" or a teacher referral, using data or screening measures, is an effective method to ensure students with valid academic needs are receiving appropriate interventions aimed at improving academic outcomes (Davis, Lindo, Compton, 2007). In this study, screening measures were used to determine which type of placement may be more appropriate for a student as well as to inform placement in supplemental intervention groups.

In addition, principals expressed utilizing several instructional leadership practices to promote educators' instruction of students with LD such as: (a) promoting a collaborative mindset or direction for instructing students with LD, (b) developing a collaborative network among staff, including professional development, for instructing students with LD, (c) providing equitable principal support and interaction, and (d) serving as a special education leader. These findings will be discussed more in-depth in the overall propostions of this study.

Finally, as hypothesized, a principal's level of understanding and positive perceptions regarding effective instruction for students with LD may have manifested in their ability to utilize and confidently engage in instructional leadership practices to promote the instruction of students with LD. Indeed, two of the principals with high understanding and positive perceptions described well-developed instructional leadership practices for students with LD.

### *Discussion of Overall Propositions*

As would be expected, the five instructional leaders in this study yielded five different overall responses regarding the three research questions addressed. However, overall propositions reveal two of these five instructional leaders stood out from the others with respect

to their knowledge and perceptions of effective instructional practices for students with LD and how to implement them in their school. They were distinct from the other instructional leaders in these combined ways: (a) both of these leaders have an advanced degree in special education and their high level of knowledge and positive perceptions about special education were evident in their communication and leadership regarding the education of students with LD, (b) they perceived a well-developed vision of collaborative responsibility, including a collaborative network among staff, as central to the academic success of students with LD, (c) they perceived their role as supporting both the general and special educators instruction of students with LD equally and perceived the special education teacher's role as integral to the general education instructional program, rather than a parallel role off to the side, and (d) their teachers perceived them as educational leaders with the knowledge and ability to support their instruction of students with LD.

### *Higher Understanding of Instruction and Instructional Leadership*

One of the primary propositions of this study is that instructional leaders who possess more understanding of effective instructional practices for all students, including those with LD, may be more prepared to fulfill the role of instructional leadership for all teachers and students. Indeed, previous research suggests that instructional leaders must develop a knowledge foundation related to quality instruction to build their capacity to engage in support activities that develop teachers' instructional practices, such as providing specific, effective feedback following observations (Ovando, 2005; Reitzug, 1994). Moreover, Stein and Nelson (2005) suggest, "as demands increase to improve teaching and learning in schools, principals must be able to know strong instruction when they see it, and to encourage it when they don't" (p. 424). This

contention is supported by their research that suggests that depth of knowledge of how students learn gives [principals] a significant advantage as effective instructional leaders by increasing their ability to identify effective instruction and engage in dialogue with teachers focused on instruction.

As supported in this study, principals who completed more special education-related training and expressed higher levels of understanding regarding effective instructional practices for students with LD, reported engaging in more instructional leadership practices with all educators that promoted effective instruction of students with LD. This proposition is similar to previous research that found principals who indicated having more knowledge about special education are involved in more aspects of the special education instructional program (Wakeman et al., 2006).

Teachers also perceived these two instructional leaders as special education leaders. In other words, they were perceived as being highly knowledgeable regarding effective instruction for students with LD as well as leading by example regarding improving their own knowledge of effective instructional practices for students with LD. This finding appeared to influence teachers' motivation to seek out effective, innovative practices to meet the needs of all students. It may also have inclined them to seek out interaction and instructional support from these two instructional leaders. Therefore, principals may prioritize increasing their own knowledge and skills related to effective instruction for all students, including students with LD, to lead improvements that increase school-wide student achievement (Bateman & Bateman, 2002; Blasé & Blasé, 2004; Crockett, 2002; DiPaola &Walther-Thomas, 2003; Elmore, 2003; NAESP, 2001; Waters & Cameron, 2006).

*Prioritizing a Shared Vision and Collaborative Practices*

Previous research suggests principals' actions and attitudes are critical to shifts in teachers' actions, attitudes, and classroom instruction (Fullan, 2001; Guzman, 1996; Sage & Burello, 1994; Sergiovanni, 1998) as well as to teacher attitudes toward instructing students with disabilities (Villa et al., 1996). Thus, an additional proposition of this study can be made; how a principal prioritizes developing a collaborative vision among staff toward high expectations, as well as accepting responsibility for the instruction of students with LD, may be an important foundation for improving the achievement of students with LD. For example, although the majority of principals in this study described being in varied stages of developing a collaborative school vision regarding the instruction of students with LD, the two with the most highly developed collaborative mindset also appeared to have the most highly developed instructional leadership practices to encourage effective instruction for students with LD. Indeed, previous research suggests that leaders who develop and set a clear sense of direction among staff by encouraging a shared understanding of goals, purpose, or vision have the greatest impact on student learning (Leithwoood, Seashore Louis, Anderson, & Wahlstrom, 2004; Meek, 2000; Witziers et al., 2003). Furthermore, principals may strengthen this vision by clearly and consistently articulating high expectations for all students, including subgroups that are sometimes marginalized and blamed for schools not making AYP.

In regard to the principals in this study, this proposition may explain how one participant expressed a high understanding of effective instruction for students with LD. However, teacher data indicated this principal was not actively providing direction to staff for developing a shared understanding of high expectations and collaborative accountability for the instruction of students with LD. What's more, his overall instructional leadership practices for students with

LD appeared to be the least developed among participants. This may suggest that an understanding of effective instruction for students with LD in isolation may not be sufficient to fulfill the role of instructional leader for the instruction of students with LD. However, it is also important to mention that this principal was assigned to his current site for the least amount of time (i.e., three years), thus suggesting that developing a collaborative understanding among staff focused on high expectations and accountability for all students, including students with LD, requires time, commitment, and prioritization.

In addition, previous research demonstrates that both general and special educators report lack of opportunities for collaboration and administrative support as two reasons for their lack of implementing effective instructional practices for students with LD (Crockett, 2004; Gersten et al., 2001; Scott et al., 1998; Scruggs & Mastropieri, 1996). However, the two principals with advanced special education training expressed providing well-developed direction and support regarding collaborative practices among the entire instructional staff, as well as between special and general educators. An additionally important finding was that only one principal intentionally modified the school's organizational structure, for instance, by changing schedules to ensure that special and general educators shared common times to discuss improving instruction. Similarly, research has found that effective leaders are purposeful about turning their schools into effective organizations that allow for collaboration and that this type of intentional scheduling reinforces the use of collaborative practices among teachers (Leithwood et al., 2004; Stein & Nelson, 2003). Therefore, given sufficient time and consistent messages from principals about the value of collaboration, teachers may learn to trust their colleagues and be willing to share their best practices, as well as challenges, to improve the instruction of all students, including those with LD.

*The Principal as Intentional Collaborator*

Another proposition can be drawn in that intentional principal interaction and support of all educators may be beneficial for the academic achievement of students with LD. For example, the two instructional leaders with extensive special education training were perceived by educators to interact and support both general and special educators consistently. Indeed, research suggests that successful leaders prioritize visibility, availability, and communication with teachers to promote enthusiasm, optimism, and a sense of mission that indirectly increases student performance (Leithwood et al., 2004; McColl-Kennedy & Anderson, 2002). Also, research conducted by Blasé and Blasé (1999) suggests the cornerstone of effective instructional leadership is principal-teacher dialogue, where principals encourage teachers to reflect on their instructional practice.

Similar to previous research (Billingsley, 2004; Crockett, 2002; Gersten et al., 2001), special educators who reported little, if any, administrative interaction expressed frustration, isolation, and limited collaborative practices with other educators and noted, "How can [the principal] know what I do if [they] never come into my classroom?" This begs the question, how can principals effectively monitor instruction and engage in dialogue focused on improving instruction of students with LD if little interaction exists? Although the prevalent conception of instructional leadership promotes a collective distribution of instructional leadership tasks among educators within a school site (see Glickman, Gordon, & Ross-Gordon, 2001), researchers also contend that in reality, responsibility for these tasks ultimately remains with the school's principal (Blasé & Blasé, 2002; DiPaola & Walther-Thomas, 2003; Spillane, Halverson, & Diamond, 2001). This is not to suggest that the principal should be the sole instructional leader at a school, as research suggests effective leaders develop, identify, and capitalize on the

competence of others (Leithwood et al., 2004). However, a principal is considered the key instructional leader at the building level (Sergiovanni, 1998) and should be expected to ensure all educators, including special educators, are indeed receiving intentional instructional support, mentoring, and training.

One possible explanation for the limited interaction between some principals and special educators relates to previous research. For example, the findings of this study suggest that with the exception of the two principals with extensive special education training, principals relied on the special educators as "experts" in instructional matters related to students with LD (Bays & Crockett, 2007). More specifically, these principals seemed to perceive that special education instruction was best left to the special educators who knew this type of instruction. Furthermore, a few principals appeared to have a "hands-off style" of instructional leadership for special educators. These practices warrant caution as it implies that most educators are highly skilled and knowledgeable about providing effective instruction for students with LD while ensuring their access to the general curriculum. In fact, research demonstrates that special educators sometimes do not have the knowledge, skills, or desire to implement research-based instructional practices, often provide undifferentiated instruction, and have limited collaboration skills (Boardman et al., 2005; Brownell et al., 2006; Moody et al., 2000).

### *Implications for Future Research*

As the instructional leadership role of elementary principals continues to grow regarding the teaching and learning of all students and teachers, so must the research regarding this topic. Currently, there is scant research addressing elementary principals' understanding and perceptions of effective instruction for students with LD or their instructional leadership

practices for students with LD. This descriptive and exploratory study represents an attempt to address that gap and build an empirical database on elementary principals' understanding and perceptions of effective instruction for students with LD and their instructional leadership practices utilized to promote educators' instruction of students with LD. However, these areas need to be examined further and confirmed through future studies.

For example, this study examined elementary principals' understanding and perceptions of effective instruction for students with LD as well as their instructional leadership practices for students with LD. Future studies may consider studying these areas in isolation to gather more in-depth information of each area. In addition, this multiple-case study utilized only interviews to explore areas and gather data related to the research questions. Future research should consider other forms of data collection, such as observations, to possibly gain a more holistic interpretation of the phenomenon.

In addition, one of the findings of this study suggests elementary principals may have a moderate understanding of effective instructional practices for students with LD. However, principals in this study were purposely selected based on their perceived and demonstrated effectiveness as special education leaders. Future large-scale qualitative or quantitative research design studies should consider selecting participants randomly in hopes of gaining more generalized insights into this topic. Additionally, principals were asked primarily to describe their conception of best practices for students with LD. Future studies should include data collection measures that allow principals to apply their understanding of effective instruction for students with LD in a situational context, such as during lesson planning or instructional observations to allow a more detailed description of their knowledge level.

Furthermore, findings suggest that although principals perceived specially designed instructional practices as necessary, some perceived them as somewhat unfeasible to implement. Research detailing educators' reported obstacles to implementing specially designed instruction exists (Crockett, 2004; Scott et al., 1998; Scruggs & Mastropieri, 1996); however, further research is needed to identify principals' perceived barriers to implementing specially designed instructional practices in hopes of ameliorating them.

Finally, findings suggest that a principal's development of a collaborative mindset or direction among educators that includes responsibility for improving the instruction of students with LD may be a foundational instructional leadership practice to promote positive outcomes for students with LD. Future research needs to investigate this topic more in-depth to identify key steps, practices, or considerations for principals to utilize in order to successfully develop a collaborative vision among educators for the instruction of students with LD.

### *Implications for Principals*

Given the focus of this study on instructional leadership, this study provides important implications for current principals as well as administrative preparation programs. The propositions suggest that understanding effective instructional practices for students with LD may influence a principal's ability to engage in instructional leadership practices with all educators. Thus, principals and aspiring principals must consider developing their understanding of instructional practices associated with positive learning outcomes for students with LD to provide meaningful feedback to teachers and monitor instructional practices in all classrooms. This understanding may help principals identify whether or not effective instruction is occurring for students with LD, as well as teacher's related support and professional development needs.

Training for principals and aspiring principals may include utilizing case methodology to provide more realistic opportunities to identify effective instructional practices and apply their understanding within a practical classroom context (Hallinger & McCary, 1990; Lyons, Schumacher, & Cameron, 2008).

An additional implication is that principals may consider actively pursuing and developing a collaborative instructional vision that addresses high expectations and accountability for all students, including students with LD. Specifically, an instructional vision may include steps to improving conditions for the instruction of students with LD and must be collaboratively agreed upon by staff to foster acceptance and implementation (Leithwood & Jantzi, 2000; Sergiovanni & Starrat, 2007). Preparation programs may consider providing aspiring principals opportunities to reflect on and develop a collaborative vision that includes improving the instruction of students with LD. Furthermore, both principals and aspiring principals may learn how to cultivate collaborative practices among those who teach students with LD by providing on-going professional development that enhances the collective teaching practice of educators as they work together within schools. Topics might include examination of effective collaboration models to decide on appropriate collaborative practices to implement, discussion to set expectations and goals for collaborative opportunities, and practice devising collaborative schedules that would allow for consistent collaborative meetings to occur.

Another key implication is that principals must consider striving to provide educators with intentional interaction and support to improve their instruction of students with LD. Again, the concept of distributive leadership may only be successful if instructional leadership tasks are intentionally and purposely distributed to stakeholders, not dispersed to educators to figure out on their own, or to other administrators who do not actively fulfill the role of instructional leader

(Bays & Crockett, 2007). Thus, principals and aspiring principals must be made aware of the warranted impact of relying on special educators as experts. They must also be made cognizant of the possible negative student achievement outcomes associated with not actively engaging in instructional leadership practices (e.g., walk throughs, specific feedback, monitoring lesson plans, cultivating collaborative practices) with all educators to promote effective instruction for all students, including students who have LD.

## *Limitations*

Qualitative research has well-established inherent limitations. For example, measures of validity and reliability do not necessarily have equivalents in qualitative research (Lincoln & Guba, 1985). However, qualitative researchers must ensure their empirical studies are trustworthy and use the term trustworthiness to encompass the use of procedures for data collection and analysis that are convincing enough to support the conclusions of the study (Brantlinger, E., Jimenez, R., Klingner, J., Pugach, M., & Richardson, V., 2005; Lincoln & Guba, 1985). Steps were taken as described below to strengthen trustworthiness and minimize inherent limitations, or threats, to interpreting the results of this study.

### *Credibility*

Brantlinger et al. (2005) remind us that credibility (the sufficiency of explanation for understanding the phenomenon under investigation) can be a potential limitation of qualitative research. For example, researchers often contend that qualitative findings are based on subjective judgments made by the researcher. To increase the credibility of this study, these strategies were incorporated through prolonged engagement, triangulation of data, and member checks. The prolonged engagement consisted of multiple in-depth interviews with participants that attempted

to gain participant's trust and attain a deeper understanding of the phenomena under investigation by pursuing ideas and emergent data over the course of the study. Data triangulation to search for convergence of, or consistency among evidence from two different types of multiple data sources was used to corroborate findings across data sources (principals and teachers) (Miles & Huberman, 1994). Member checks were used to confirm interpretations by allowing all participants to review and confirm the accuracy of interview interpretations and principal participants were asked to elaborate upon data gathered in the first interview during their final interview. Although these three strategies were utilized to increase the credibility of the findings, it is important to remember that data analysis was ultimately completed based on personal judgments and interpretations.

*Transferability*

Transferability (often referred to as generalizability in quantitative research) refers to the extent to which the findings in this study can extend to other contexts (Lincoln & Guba, 1985). Limitations regarding transferability are present in this study. For example, although relevant demographic data from each school site was collected as well as descriptive information from each participant, the participants were not chosen randomly, thus decreasing the transferability of findings from this study. Rather, the participants of this study were purposely selected from the same school district in one state based on their perceived and demonstrated effectiveness as special education leaders. The findings of this study may not illustrate elementary principal's understanding and perceptions of effective instruction and their instructional leadership strategies for students with LD who are not perceived or determined to be effective special education leaders.

*Dependability*

Dependability answers the question, If the study were done again and analyzed in the same way, would the results be the same? Although the same data collection measures and procedures and were used with each participant (e.g., interview protocols) to minimize threats to dependability, it is generally acknowledged (Lincoln & Guba, 1985; Miles and Huberman; 1994) that due to the nature of the in-depth study of unique situations, the conditions will never be "exactly" the same, and therefore it is likely that findings will not replicate easily.

*Confirmability*

This final aspect of establishing trustworthiness refers to making sure that data collection and interpretation are free from bias. Peer debriefing, collaborative work, and researcher reflexivity were utilized in an attempt to control for bias and inaccuracy when interpreting and analyzing data. A colleague familiar with the study was asked to review and provide critical feedback on descriptions, analyses, interpretations, and the study's results. Discrepancies were resolved through discussion and revisions were made if needed. As mentioned, collaborative work also included double-coding of 10% of interview audiotapes for an interrater reliability of 90%.

Finally, personal bias, or researcher reflexivity, was taken into consideration. I attempted to understand and self-disclose assumptions, beliefs, and biases related to my study. I was employed as a general education teacher and a special education facilitator or "team leader." While navigating these roles, I encountered elementary principals who seemed to possess little knowledge of effective instructional practices for students with disabilities and who did not appear to attempt to fulfill the role of instructional leader for special education instruction on their campus. That said, I attempted to acknowledge these past experiences and consider the breadth of a principal's vast job responsibilities. On a positive note, these experiences prompted

me to further explore elementary principals' understanding and perceptions of instruction for students with LD and what principals are doing on their campus to promote educators' instruction of students with LD.

Table 1
*Summary of Participants' Sites*

| Case | Grades | Total Student Population | Free and Reduced Lunch | English Language Learners | Special Education Students |
|---|---|---|---|---|---|
| A | PK - 5 | 626 | 97% | 70% | 6% |
| B | PK - 5 | 462 | 97% | 61% | 5% |
| C | PK - 5 | 437 | 75% | 46% | 15% |
| D | PK - 5 | 660 | 91% | 47% | 9% |
| E | PK - 5 | 411 | 98% | 34% | 9% |

Table 2
*Summary of Special Education Subgroup AYP Passing Rate*

| School | 2006 - 2007 | | 2005 – 2006 | | 2004 – 2005 | |
|---|---|---|---|---|---|---|
| | R | M | R | M | R | M |
| A | 60% | 77% | 52% | 67% | 34% | 47% |
| B | 71% | 87% | 53% | 79% | 41% | 55% |
| C | 72% | 71% | 59% | 68% | 39% | 49% |
| D | 73% | 74% | 43% | 56% | 30% | 50% |
| E | 95% | 75% | 61% | 68% | 57% | 57% |

Table 3
*Summary of Principal Demographics*

| Principal | Years as Principal/ Current Site | Highest Level of Education | Certificates Held | Number of College-Level Special Education Courses | Special Education Trainings in Past Two Years |
|---|---|---|---|---|---|
| A | 21/3 | M.A. Educational Administration | •Secondary Spanish, Bilingual, History, Language Arts<br>•Administrative | 2 | Two: Both on inclusive practices |
| B | 6/5 | M.A. Reading | •Secondary English, Spanish, Bilingual<br>•Reading Specialist<br>•Administrative | 0 | One: Inclusive practices |
| C | 8/8 | M.A. Educational Administration | •Elementary General Education<br>•Administrative | 2 | Three: Inclusive practices, testing requirements, legal issues |
| D | 5/5 | M.A. Special Education | •Special Education<br>•Early Childhood<br>•Bilingual<br>•Administrative | Numerous | Two: Inclusive practices and testing requirements |
| E | 12/12 | M.A. Special Education | •Elementary General Education<br>•Special Education<br>•Administrative | Numerous | Several: Inclusive practices, legal issues, differentiated instruction, referral process, instructional settings, testing requirements |

Table 4
*Summary of Teacher Demographics*

| Site | Position | Years as Teacher/ Current Position | Highest Level of Education | Certificates Held | Number of Years teaching Students with LD | Number of Students with LD Currently Teaching |
|---|---|---|---|---|---|---|
| A | General Educator: 5th grade | 19/3 | B.A. General Education | •General Education | 7 | 4 |
| | Special Educator: Resource | 3/2 | B.A. Special Education | •Special Education | 3 | 10 |
| B | General Educator: 5th grade | 10/2 | B.A. General Education | •General Education<br>•Bilingual | 9 | 2 |
| | Special Educator: Resource | 3/3 | M.Ed Special Education | •Special Education<br>•General Education<br>•Bilingual | 3 | 10 |
| C | General Educator: 5th grade | 35/10 | M.Ed. Curriculum and Instruction | •Elementary General Education<br>•Bilingual | 30 | 4 |
| | Special Educator: Resource | 32/20 | B.A. Special Education | •Special Education<br>•Early Childhood | 25 | 30 |
| D | General Educator: 3rd grade | 9/3 | B.A.General Education | •General Education | 9 | 7 |
| | Special Educator: Resource | 26/4 | M.Ed Special Education | •Special Education<br>•General Education<br>•Bilingual | 20 | 6 |
| E | General Educator: 3rd grade | 20/15 | B.A General Education | •Elementary General Education | 20 | 2 |
| | Special Educator: Resource | 26/10 | B.A. Special Education | •Special Education<br>•General Education | 22 | 11 |

Table 5
*Start Codes*

| | |
|---|---|
| Understanding Instruction | UI |
| UI: Explicit Instruction | UI- EI |
| UI: Grouping Formats | UI-GF |
| UI: Procedural Facilitators | UI-PF |
| UI: Directed Questioning | UI-DQ |
| UI: Corrective Feedback | UI-CF |
| UI: Control Task Difficulty | UI-CTD |
| UI: Differentiated Instruction | UI-DI |
| Perceptions of SD Instruction | P-SDI |
| P-SDI: Necessity | P-SDI-N |
| P-SDI: Feasibility | P-SDI-F |
| Instructional Leadership | IL |
| IL: Mission | IL-M |
| IL: Data | IL-D |
| IL: Collaboration | IL-C |
| IL: Support | IL-S |
| IL: Professional Development | IL-PD |
| IL: Service Delivery | IL-SD |

Table 6
*Revised Codes*

| | |
|---|---|
| Understanding Instruction | UI |
| UI: Explicit Instruction | UI- EI |
| UI: Grouping Formats | UI-GF |
| UI: Procedural Facilitators | UI-PF |
| UI: Directed Questioning | UI-DQ |
| UI: Corrective Feedback | UI-CF |
| UI: Control Task Difficulty | UI-CTD |
| UI: Differentiated Instruction | UI-DI |
| UI: Access General Curriculum | UI-AGC |
| UI: Other | UI-O |
| Perceptions of SD Instruction | P-SDI |
| P-SDI: Necessity | P-SDI-N |
| P-SDI: Feasibility | P-SDI-F |
| P-SDI: Feasibility - Barriers | P-SDI-F-B |
| Instructional Leadership | IL |
| IL: Mission | IL-M |
| IL: Mission: Responsibility | IL-M-R |
| IL: Mission: Achievement/Expectations | IL-M-A/E |
| IL: Data | IL-D |
| IL: Data: Screening | IL-D-S |
| IL: Data: Progress Monitoring | IL-D-PM |
| IL: Data: Forming Groups | IL-D-FG |
| IL: Data: Determine Instruction | IL-D-DI |
| IL: Collaboration: Principal | IL-C-P |
| IL: Collaboration: Dialogue/Decision | IL-C-D/D |
| IL: Collaboration: Network | IL-C-N |
| IL: Collaboration: SPED/GE | IL-C-S/GE |
| IL: Collaboration: SPED expectations | IL-S-EX |
| IL: Support | IL-S |
| IL: Support: Principal | IL-S-P |
| IL: Support: Principal: Walk-through | IL-S-P-WT |
| IL: Support: Principal: Feedback/Dialogue | IL-S-P-F/D |
| IL: Support: Principal: Lessons Plans | IL-S-P-LP |
| IL: Support: Principal: SPED as expert | IL-S-P-S-EX |
| IL: Professional Development | IL-PD |
| IL: Professional Development: Principal | IL-PD-P |
| Il: Professional Development: Principal: Educational Leader | IL-PD-P-EL |
| IL: Professional Development: In-service | IL-PD-I |
| IL: Professional Development: District | IL-PD-D |
| IL: Service Delivery | IL-SD |
| IL: Service Delivery: Inclusion | IL-SD-I |
| IL: Service Delivery: Resource Room | IL-SD-RR |
| IL: Service Delivery: Intervention Groups | IL-SD-IG |

Table 7

*Matrix of Understanding, Perceptions, and Instructional Leadership for Instruction of Students with LD*

| Principal | Understanding of Instruction for Students with LD | Perceptions of Specially Designed Instruction | Instructional Leadership Practices for Students with LD |
|---|---|---|---|
| **A** | **HIGH**:<br>• Differentiation during small group<br>• Explicit modeling<br>• Intensive instruction<br>• Control of task difficulty; scaffolding and chunking<br>• Procedural facilitators<br>• Questioning<br>• Graphic organizers<br>• Manipulatives/visuals<br>• Discussion/Review<br>• Access GE curriculum<br>• Adaptations<br>• Modifications | **Necessary:**<br>Yes; for all students; SPED teacher responsible for implementation<br><br>**Feasible:**<br>Challenging and unrealistic to specifically individualize for all students. Also difficult due to personnel resources. | **LIMITED:**<br>**Service Delivery:** Continuum of services; focus on inclusion to access GE curriculum and meet inclusion criterion; students with LD serviced with non-identified peers; students with LD typically separated out when forming intervention groups<br>**Data:** Not specified how data is used to determine instructional delivery<br>**Mission:** Not developed – "Difficult to motivate teachers"<br>**Collaboration**: No developed network of instructional collaboration/support; no developed collaborative practices between special and general educators; inequitable planning and collaboration opportunities; emphasis on special educator to take the lead; no monitoring by administration<br>**Support**: Inequitable principal support, interaction primarily with GE educators (walk-throughs, feedback); emphasis on special educator to take the lead<br>**Professional Development:** Emphasis on PD opportunities for general educators; limited interaction with special educators regarding PD needs |
| **B** | **LIMITED:**<br>• Differentiation during small groups<br>• Grouping formats<br>• Extra time<br>• Motivation strategies<br>• Extra resources<br>• Manipulatives/visuals | **Necessary:**<br>Yes; for all students<br><br>**Feasible:**<br>Yes, but need training. | **LOW MODERATE:**<br>**Service Delivery:** Continuum of services; focus on inclusion and small groups; students with LD serviced with non-identified peers<br>**Data:** Assessment data used to determine service delivery, not "label"; students with LD not separated out when planning intervention groups<br>**Mission:** Beginning to make the shift in mindset towards collaborative responsibility for serving students with LD, collaborative dialogue, data, rationale, and logic used to motivate teachers and change attitudes.<br>**Collaboration:** Collaborative data analysis meeting**;** collaboration of SPED and GE |

| | | | |
|---|---|---|---|
| | | | teachers during district trainings; collaborative responsibility for providing trainings on campus; No network of instructional collaboration/support; no 'vision' or developed collaborative practices between special and general educators; emphasis on special educator to take the lead; no monitoring by principal<br><br>**Support:** Perceived inequitable principal support, interaction primarily with GE educators; emphasis on special educator as 'expert"<br><br>**Professional Development:** Emphasis on PD for all educators |
| **C** | **MODERATE:**<br>• Differentiation during small groups<br>• Interactive grouping formats<br>• Reteaching/extra support<br>• Discussion with questioning<br>• More practice opportunities<br>• Manipulatives<br>• Motivation strategies<br>• Technology<br>• Multiple response formats<br>• Access GE curriculum | **Necessary:**<br>Yes; for all students<br><br>**Feasible:**<br>Difficult because of limited personnel and teachers'<br>understanding | **HIGH MODERATE:**<br><br>**Service Delivery:** Continuum of services; focus on inclusion and small groups; students with LD serviced with non-identified peers<br><br>**Data:** Assessment screening data used to determine service delivery, not "label"; students with LD not separated out when planning intervention groups<br><br>**Mission:** In the process of developing and maintaining mindset towards collaborative responsibility for serving students with LD; collaborative dialogue, data, and rationale used to motivate teachers and change attitudes.<br><br>**Collaboration:** Collaborative data analysis meetings; collaboration of SPED and GE teachers during district trainings; collaborative responsibility for providing trainings on campus; In process of developing network of instructional collaboration/support; In process of developing collaborative practices between special and general educators; however, emphasis placed on special educator to take the lead<br><br>**Support:** Equitable principal interaction and dialogue for all teachers; however, emphasis on special educator as 'expert"<br><br>**Professional Development:** Emphasis on PD for all educators, trainings include information related to inclusive instruction |

| | | | |
|---|---|---|---|
| **D** | **HIGH:**<br>• Using research-based best practices<br>• Differentiation during small groups<br>• Small, homogenous groups<br>• Explicit instruction<br>• Discussion with questioning<br>• Control of task difficulty; scaffolding and chunking<br>• Procedural facilitators<br>• Reteaching/extra support<br>• Modifications<br>• Adaptations<br>• Accommodations<br>• Paraphrasing<br>• Manipulatives<br>• Access GE curriculum | **Necessary:**<br>Yes; for all students<br><br>**Feasible:**<br>Yes, but need training and teacher willingness. | **HIGH:**<br>Service Delivery: Continuum of services; focus on inclusion and small groups; students with LD serviced with non-identified peers<br>**Data:** Assessment screening data used to determine service delivery, not "label"; students with LD not separated out when planning intervention groups<br>**Mission:** Continuous collaborative dialogue and decision-making to develop and maintain mindset towards collaborative responsibility for serving students with LD.<br>**Collaboration:** Collaborative data analysis meetings; collaboration of SPED and GE teachers during district trainings; collaborative responsibility for providing trainings on campus; Developed network of instructional collaboration/support/dialogue, including not making decisions in isolation regarding education of students with LD; In process of further developing collaborative practices between special and general educators<br>**Support:** Equitable principal interaction and dialogue for all educators (i.e. walkthrough, feedback, meetings) including lesson plan monitoring<br>**Professional Development:** Emphasis on PD for all educators; trainings include information related to inclusive instruction; Principal is perceived as educational leader |

| | | | |
|---|---|---|---|
| **E** | **HIGH:**<br>• Using research-based best practices<br>• Differentiation during all lessons, including small groups<br>• Small, homogenous groups<br>• Peer tutoring<br>• Explicit instruction, including think alouds<br>• Discussion with questioning<br>• Control of task difficulty; scaffolding and chunking<br>• Procedural facilitators<br>• Multiple practice opportunities<br>• Intensive pacing<br>• Graphic organizers<br>• Modifications<br>• Adaptations<br>• Accommodations<br>• Access GE curriculum | **Necessary:**<br>Yes; for all students<br><br>**Feasible:**<br>Yes, but need relevant training | **HIGH:**<br>**Service Delivery:** Continuum of services; focus on inclusion and small groups; students with LD serviced with non-identified peers<br>**Data:** Assessment screening data used to determine service delivery, not "label"; students with LD not separated out when planning intervention groups<br>**Mission:** Continuous collaborative dialogue used to come to consensus regarding high expectations and collaborative responsibility for educating every child everyday, including students with LD.<br>**Collaboration:** Collaborative data analysis meetings; Collaboration of SPED and GE teachers during district trainings; Collaborative responsibility for providing trainings on campus; Developed network of instructional collaboration/support/dialogue; Developed collaborative practices between special and general educators, including formally scheduled grade level meetings to accommodate for special educator's accessibility.<br>**Support:** Equitable principal interaction and open-dialogue for all educators (i.e. walkthrough, feedback, meetings), including lesson plan monitoring and encouraging teachers to take risks<br>**Professional Development:** Emphasis on PD for all educators; trainings include information related to inclusive instruction and focus on differentiated instruction; Principal is perceived as educational leader |

Table 8

*Key Findings of Principal Instructional Leadership Practices*

| Principal | Using Data To Determine Instructional Delivery | Vision for Promoting Collaborative Mindset | Established Network of Support and Collaboration | Equitable Principal Interaction with Educators | Special Education Leader |
|---|---|---|---|---|---|
| A | | | | | |
| B | X | X | | | |
| C | X | X | | X | |
| D | X | X | X | X | X |
| E | X | X | X | X | X |

Table 9

*Key Finding as Related to Research Questions*

| **Principal** | **Level of Understanding Instruction for Students with LD** | **Perceptions of Implementing: Necessary** | **Perceptions of Implementing: Feasible** | **Level of Instructional Leadership Practices for Students with LD** |
|---|---|---|---|---|
| A | High | X | Challenging and unrealistic | Limited |
| B | Limited | X | Yes, with training | Low Moderate |
| C | Moderate | X | Difficult | High Moderate |
| D | High | X | Yes, with training | High |
| E | High | X | Yes, with training | High |

Appendix A

Consent Form

*IRB APPROVED ON: (ORSC USE ONLY)* *EXPIRES ON:*

Title Elementary Principals' Instructional Leadership for Students with Learning Disabilities
IRB PROTOCOL #

Conducted by: Jennifer Meyer Heckert of The University of Texas at Austin: Special Education Department/SZB 306. Phone: (562) 761-1086 Email: jennifermeyer@mail.utexas.edu
Faculty Sponsor: Dr. Sharon Vaughn Phone: (512) 232-2320 Email: svaughn@teachnet.edb.utexas.edu

You are being asked to participate in a research study. This form provides you with information about the study. The person in charge of this research will also describe this study to you and answer all of your questions. Please read the information below and ask any questions you might have before deciding whether or not to take part. Your participation is entirely voluntary. You can refuse to participate without penalty or loss of benefits to which you are otherwise entitled. You can stop your participation at any time and your refusal will not impact current or future relationships with UT Austin or participating sites. To do so simply tell the researcher you wish to stop participation. The researcher will provide you with a copy of this consent for your records.

**The purpose of this study** is to explore instructional leadership strategies utilized by five elementary principals and experienced by 10 elementary educators to promote academic achievement for students with learning disabilities.

**If you agree to be in this study, we will ask you to do the following things:**

- Principals: Complete two interviews (one initial and a brief follow-up)
- Educators: Complete one interview (one initial)

**Total estimated time to participate** in this study is 90 minutes for principals and 30 minutes for educators.

**Risks of being in the study:**

- The risk associated with this study is no greater than everyday life. However, although measures to ensure confidentiality will be taken, there is the risk of loss of confidentiality. If you wish to discuss the information above or any risks you may experience, you may ask questions now.

**Benefits of being in the study:**

- Although you may not directly benefit from the study, this study may eventually provide implications for effective instructional leadership strategies to promote academic achievement for students with learning disabilities as well as preparation and training of elementary principals.

**Compensation:**

- There is no compensation for participation in this study.

**Confidentiality and Privacy Protections:**

- All interviews will be audio-recorded;
- Tapes will be coded so that no personally identifying information is visible in them;
- Tapes will be kept in a secure place (e.g., a locked file cabinet in the investigator's home);
- Tapes will be heard or viewed only for research purposes by the investigator and her associates;
- Tapes will be erased after they are transcribed or coded

The records of this study will be stored securely and kept confidential. Authorized persons from The University of Texas at Austin and members of the Institutional Review Board, and have the legal right to review your research records and will protect the confidentiality of those records to the extent permitted by law. All publications will exclude any information that will make it possible to identify you as a subject. Throughout the study, the researchers will notify you of new information that may become available and that might affect your decision to remain in the study.

**Contacts and Questions:**

If you have any questions about the study please ask now. If you have questions later, want additional information, or wish to withdraw your participation call the researchers conducting the study. Their names, phone numbers, and e-mail addresses are at the top of the previous page. If you have questions about your rights as a research participant, complaints, concerns, or questions about the research please contact Jody Jensen, Ph.D., Chair, The University of Texas at Austin Institutional Review Board for the Protection of Human Subjects at (512) 232-2685 or the Office of Research Support and Compliance at (512) 471-8871 or email: orsc@uts.cc.utexas.edu.
You will be given a copy of this information to keep for your records.

## Statement of Consent:

I have read the above information and have sufficient information to make a decision about participating in this study. I consent to participate in the study.

Signature:_____ Date: _____

_____ Date: _____
Signature of Person Obtaining Consent

Signature of Investigator:_____ Date: _____

Appendix B

Principal Participant Information

*IRB# 2008-04-0006*

Principal Interview Participant Information
Jennifer Meyer Heckert, Researcher

**Note to Participants**: All identifying information will be kept confidential. Information gathered will be used for descriptive purposes only.

Name _____ Date _____

Address _____

Email_____

Phone_____

Gender_____ Age_____ Ethnicity_____

| | | |
|---|---|---|
| 1. | Total # of years principal/Number of years at current school | |
| 2. | Total # of years teacher/Grade levels/Areas | |
| 3. | Highest level of education: bachelor's, master's, Ph.D./Area? | |
| 4. | Number of college level special education courses taken/Type of course | |
| 5. | Certification(s) held | |
| 6. | List types of trainings related to special education instruction attended in last two years (university courses, PD, workshops, program specific trainings) | |

Appendix C

Educator Participant Information

*IRB# 2008-04-0006*

Educator Interview Participant Information
Jennifer Meyer Heckert, Researcher

**Note to Participants**: All identifying information will be kept confidential. Information gathered will be used for descriptive purposes only.

Name _____ Date _____

Address _____

Email_____

Phone_____

Gender_____ Age_____ Ethnicity_____

| | | |
|---|---|---|
| 1. | Total # of years teacher/Number of years at current school/Number years current position | |
| 2. | Grade levels/Areas/Number of years | |
| 3. | Current # of students with LD instructed/Number of years instructed students with LD | |
| 4. | Highest level of education: bachelor's, master's, Ph.D. | |
| 5. | Certification(s) held | |
| 6. | Number of college level special education courses taken/Type of course | |
| 7. | List types of trainings related to special education instruction attended in last two years (university courses, PD, workshops, program specific trainings) | |

Appendix D

Research Questions Related To Interview Protocol Questions

| RESEARCH QUESTIONS | MEASURE | ITEM# |
|---|---|---|
| What instructional practices do they identify as associated with improved outcomes for students with learning disabilities? | PILD 1 | 1, 2, 3, 4, 5, 6, 7 |
| | PILD 2 | 2, 6, 7 |
| | EILD | 7 |
| How necessary and feasible do they perceive these practices for students with learning disabilities? | PILD 1 | 8 |
| | PILD 2 | 7 |
| | EILD | 7 |
| What instructional leadership practices do they utilize to promote educators' instruction of students with learning disabilities? | PILD 1 | 1, 2, 3, 4, 6, 7, 9 |
| | PILD 2 | 1, 2, 3, 4, 5, 7 |
| | EILD | 1, 2, 3, 4, 5, 6, 7, 8, 9 |

Appendix E

Principal Initial Interview Protocol

1) Describe how your site provides instructional services for students with LD?
    a. How are services for students determined?
    b. What is most effective about this model?
2) Who and/or what has been instrumental in helping your special education students, including students with LD, achieve AYP growth?
3) What or who do you use as a resource to inform yourself about effective instruction for students with LD?
4) Who provides support to educators at your site to promote effective instruction for students with LD?
    a. What type of support is typically offered?
5) What is special about the education of students with LD?
    a. Is there a difference between instruction for students with LD and instruction for students who are typically achieving? Can you provide some examples?
6) You were identified as a principal who is effective with working with students with disabilities. What are some of the successful practices you utilize to support and promote teachers instruction of students with LD?
    a. If a teacher came to you and needed help with providing effective instruction for a student with LD, what would be the first step?
7) What practices do you use to monitor teachers' instruction of students with LD?

a. Which are most effective? Why?
b. What are some typically instructional practices you would ideally hope to see when observing educators' instruction of students with LD?

8) Recent legislation suggests educators implement instruction in which content, instructional delivery or assessments are adapted (i.e., differentiated, individualized) to meet the academic needs of students.
    a. How necessary is it for teacher at your site to implement instructional practices to meet the unique learning needs of students with LD?
    b. How feasible is it for teacher at your site to implement instructional practices to meet the unique learning needs of students with LD?
9) How do you encourage and motivate teachers to meet the academic needs of all students, including those with LD?
10) Is there anything you would like to add to our discussion?

Appendix F

Sample Principal Final Interview Protocol

1) You indicated one of the reasons SPED students have achieved AYP growth is due to "the team and that everyone has played a role in helping SPED students achieve growth."
    a. What are your specific responsibilities for supporting the coordination of this school-wide effort?
2) What is your most important responsibility regarding the instruction and academic achievement of students with LD?
3) You indicated "your special ed teachers" are the main providers of support to other educators at your site (e.g., plan together, attend trainings) to facilitate effective instruction for students with LD
    a. Can you please elaborate on this?
    b. What role do you play in this process?
4) Can you please describe some of the strategies or steps you would take to help a teacher figure out how to deliver more effective instruction for a student with LD?
    a. What is the most typical kind of support or interaction you have with a teacher regarding improving their instruction for a student with LD? How often?
    b. You also mentioned that you "encourage dialogue about instruction among educators" to facilitate instruction. Can you describe this?

5) You mentioned “walk-throughs and conversations about instruction observed” as one of the tools you use to monitor teachers’ instruction of SPED students.
    a. Can you describe the process or contents of some of your typical conversations with teachers about instruction for sts with LD? Purpose?
6) You indicated you believe instruction for students with LD is “ not really different, it is just more or more support”
    a. Can you please elaborate on this?
    b. Can give me some examples of best practices of instructional strategies that you believe support students with LD and enable them to learn effectively?
7) You indicated you believe it is necessary “for all kids” and “difficult” for teachers at your site to implement individualized or adapted instruction and content to meet the unique needs of students with LD.
    a. Can you elaborate and give examples of why?
    b. What are some of the big ideas about individualized or adapted instructional practices you have shared with your teachers in order to improve the instruction of students with LD?
    c. How do you ensure your teachers have the knowledge and skills to implement SD/adapted instructional practices for students with LD?
8) Is there anything you would like to add to our discussion?

Appendix G

Educator Interview Protocol

1) How does your site provide services for students with LD?
    a. How are services determined?
2) Who provides support and information to you regarding your instruction for students with LD?
    a. If you had questions or problems about instructing your students with LD, what would you do first? Who would you talk to?
    b. What is the most typical type of support offered?
3) What opportunities do you have to collaborate with other educators at your (i.e., meetings, planning, trainings) site to support your instruction of students with LD?
    a. If so, who attends? How often?
    b. How does your principal promote these opportunities?
4) What professional development or in-service trainings does your principal promote to support your instruction of students with LD?
    a. If so, who attends? How often? Topics related to students with LD?
    b. If not, does the district provide trainings? Who attends?
5) What opportunities do you have to communicate and/or collaborate with your principal about instruction for your students with LD?
    a. If so, how are conversations typically structured? How are these conversations helpful for your instruction of students with LD?

b. Does your principal complete walkthroughs/observations/monitor lesson plans? How often?

6) How does your principal encourage or motivate you to improve the academic achievement of your students with LD? Your instruction for students with LD?
    a. Overall, how would you describe your principal's philosophy or vision for providing instruction for students with LD?
7) Your principal was identified as effective with working with students with disabilities. What are some big ideas regarding effective instruction for students with LD have they shared with you?
    a. What are some big ideas regarding individualizing or adapting instruction to meet the unique needs of students with LD they have shared with you?
    b. How does your principal motivate you to adapt or individualize instruction to meet the unique learning needs of students with LD?
8) In an ideal world, what support or training is needed by your principal to support your instruction of students with LD?
9) On a scale from 1-10 how capable is your principal at providing support for your instruction of students with LD? Why?
10) Is there anything you would like to add to our discussion?

References


Baker, S., Gersten, R., & Lee, Dae-Sik. (2002). A synthesis of empirical research on teaching mathematics to low-achieving students. *The Elementary School Journal, 103,* 51-73.

Baker, J. M., & Zigmond, N. (1990). Are regular education classes equipped to accommodate students with learning disabilities? *Exceptional Children, 56*, 515-526.

Baker, J. M., & Zigmond, N. (1995). The meaning and practice of inclusion for students with learning disabilities: Themes and implications from the five cases. *The Journal of Special Education, 29*(2), 163-180.

Barnett, C., & Monda-Amaya, L. E. (1998). Principals' knowledge of and attitudes toward inclusion. *Remedial and Special Education, 19*(3), 181-192.

Bateman, B. (1968). The efficacy of an auditory and a visual method of first grade reading instruction with auditory and visual learners. In H. K. Smith (Ed.), *Perception and reading* (pp. 105-112). Newark, DE: International Reading Association. (ERIC Document Reproduction Service No. ED 074 442).

Bateman, D., & Bateman, C. F. (2002). *A principal's guide to special education.* Arlington, VA: Council for Exceptional Children.

Bays, D. A., & Crockett, J. B. (2007). Investigating instructional leadership for special education. *Exceptionality, 15,* 143-161.

Beck, L. G., & Murphy, J. (1992). Searching for a robust understanding of the principalship. *Educational Administration Quarterly, 28*(3), 387-396.

Bentum, K., & Aaron, P.G. (2003). Does reading instruction in learning disability resource rooms really work?: A longitudinal study. *Reading Psychology, 24*, 361-382.

Billingsley, B. S. (2002a). Improving special education teacher retention: Implications from a decade of research. *Journal of Special Education Leadership, 15*, 60-66.

Billingsley, B. S. (2002b). Special education's role in preparing responsive leaders for inclusive schools. *Remedial and Special Education, 23*(3), 157-168.

Billingsley, B. S. (2004). Promoting teacher quality and retention in special education. *Journal of Learning Disabilities, 37*(5), 370-376.

Billingsley, B. S., & Cross, L. H. (1991). Teachers' decisions to transfer from special to general education. *Journal of Special Education, 24*, 496-511.

Blasé, J., & Blasé, J. (1999). Principals' instructional leadership and teacher development: Teachers' perspectives. *Educational Administration Quarterly, 35*(3), 349-378.

Blasé, J., & Blasé, J. (2000). *Handbook of instructional leadership: How successful principals promote teaching and learning* (2nd ed.). Thousand Oaks, CA: Corwin Press.

Blasé, J., & Blasé, J. (2004). The micropolitics of instructional supervision: A call for research. *Educational Administration Quarterly, 38*(1), 6-44.

Boardman, A. G., Arguelles, M. E., Vaughn, S., Hughes, M. T., & Klingner, J. (2005). Special education teachers' views of research-based practices. *The Journal of Special Education, 39*, 168-180.

Boe, E. E., Barkanic, G. & Leow, C. S. (1999). *Retention and attrition of teachers at the school level: National trends and predictors* (Data Analysis Report No. 1999-DARI). Philadelphia: University of Pennsylvania, Center for Research and Evaluation in Social Policy.

Borkowski, J. G., & Turner, L. A. (1990). Transsituational characteristics of metacognition. In W. Schneider & F. E. Weinert (Eds.), *Interactions among aptitudes, strategies, and knowledge in cognitive performance* (pp. 159-176). New York: Springer-Verlag.

Bossert, S., Dwyer, D., Rowan, B., & Lee, G. (1982). The instructional management role of the principal. *Educational Administration Quarterly, 18*(3), 34-64.

Brantlinger, E., Jimenez, R., Klingner, J., Pugach, M., & Richardson, V. (2005). Qualitative studies in special education. *Exceptional Children, 71*(2), 195-207.

Brophy, J. E., & Good, T. L. (1986). Teacher effects-results. In M. C. Wittrock (Ed), *Handbook of Research on Teaching* (3rd Ed.), (pp. 328-375). New York: MacMillan.

Brownell, M. T., Adams, A., Sindelar, P., Waldron, N., & Vanhover, S. (2006). Learning from collaboration: The role of teacher qualities. *Exceptional Children, 72*, 169-185.

Bryant, D.P., Hartman, P., & Kim, S. A. (2003). Using explicit and strategic instruction to teach division skills to students with learning disabilities. *Exceptionality, 11,*151-164.

Carnine, D. W., Silbert, J., & Kameenui, E. J. (1997*). Direct instruction reading* (3rd ed.). Upper Saddle River, NJ: Merrill.

Center on Education Policy, (2007). *From the capitol to the classroom: Year five of the No Child Left Behind Act*. (Washington DC). Retrieved January 3, 2008, from http://www.cep-dc.org/nclb/Year5/Press.

Chalfant, J. (1998). Why Kirk stands alone. *Learning Disabilities Research & Practice*, *13*(1), 2-7.

Chall, J. S. (2000). *The academic achievement challenge: What really works in the classroom?* New York: Guilford Press.

Clouse, T. L. (1993). Special education teachers' opinions of generic and program models of supervision. *Dissertation Abstracts International, 54* (07A), 2533.

Cook, B. G. (2001). A comparison of teachers' attitudes toward their included students with mild and severe disabilities. *The Journal of Special Education, 34*, 203-213.

Cook, B. G., Semmel, M. I., & Gerber, M. M. (1999). Attitudes of principals and special education teachers toward the inclusion of students with mild disabilities: Critical differences of opinion. *Remedial and Special Education, 20*, 199-207.

Cooper, H. (1998). *Synthesizing research: A guide for literature reviews*. Thousand Oaks, CA: Sage Publications.

Council of Chief State School Officers. (1996). Interstate School Leaders Licensure Consortium (ISLLC) *Standards for School Leaders.* Washington, DC: Author. Available: http://www.ccsso.org/content/pdfs/isllcstd.pdf.

Crockett, J. B. (2002). Special education's role in preparing responsive leaders for inclusive schools. *Remedial and Special Education, 23*, 189-199.

Crockett, J. B. (2004). Taking stock of science in the schoolhouse: Four ideas to foster effective instruction. *Journal of Learning Disabilities, 37*, 189-199.

Crockett, J. B., & Kauffman, J. M. (1998). Classrooms for students with learning disabilities: Realities, dilemmas, and recommendations for service delivery. In B. Wong (Ed.), *Learning about learning disabilities* (2nd ed.). San Diego: Academic Press.

Davis, G. N., Lindo, E. J., & Compton, D. L. (2007). Children at risk for reading failure: Constructing an early screening measure. *TEACHING Exceptional Children, 39*(5), 32-37.

Davidson, D. N., & Algozzine, B. (2002). Administrators' perceptions of special education law. *Journal of Special Education Leadership, 15*(2), 43-48.

Davidson, D. N., & Gooden, J. S. (2001). Are we preparing beginning principals for the special education challenges they will encounter? *ERS Spectrum, 19*(4), 42-49.

deBettencourt, L. (1999). General educators' attitudes toward students with mild disabilities and their use of instructional strategies: Implications for training. *Remedial and Special Education, 20*, 27-35.

DeSimone, J. R., & Parmar, R. S. (2006). Middle School Mathematics Teachers' Beliefs about Inclusion of Students with Learning Disabilities. *Learning Disabilities Research & Practice*, *21*(2), 98-110.

DiPaola, M. F. & Tschannen-Moran, M. (2003). The principalship at a crossroads: A study of the conditions and concerns of principals. *NASSP Bulletin, 87* (634), 43-65.

DiPaola, M. F. & Walther-Thomas, C. (2003). *Principals and special education: The critical role of school leaders* (COPSSE Document No. 1B-7E). Gainesville, FL: University of Florida, Center on Personnel Studies in Special Education.

Donovan, M. S., & Cross, C. T. (2002). *Minority students in special and gifted education*. Washington , DC: National Academy Press.

Edmonds, R. (1979). Effective schools for the urban poor. *Educational Leadership, 37*(1), 15-18, 20-24.

Elbaum, B., Vaughn, S., Hughes, M., Moody, S. W., & Schumm, J. S. (1999). Grouping practices and reading outcomes for students with disabilities. *Exceptional Children, 65*, 399-415.

Engelmann, S., & Carnine, D. W. (1982). *Theory of instruction: Principles and applications*. New York: Irvington.

Englert, C. S., & Mariage, T. V. (1991). Making students partners in the comprehension process: Organizing the reading "POSSE." *Learning Disabilities Quarterly, 14*, 123-138.

Englert, C. S., & Thomas, C. C. (1987). Sensitivity to text structure in reading and writing. A comparison between learning disabled and non-learning disabled students. *Learning Disability Quarterly, 10*(2), 93-105.

Farley, M. M. (1991). Principal and teachers' perceptions of instructional supervision of programs for students with disabilities. *Dissertation Abstracts International, 52*(10A), 3578.

Fletcher, T., Bos, C., & Johnson, L. (1999). Accommodating English language learners with language and learning disabilities in bilingual education classrooms. *Learning Disabilities Research & Practice, 14*(2), 80-91.

Fletcher, J. M., Lyon, G. R., Fuchs, L. S., & Barnes, M. A. (2007). *Learning disabilities: From identification to intervention.* New York: Guilford Press.

Franks-Randall, C. A. (1998). Supervisory practices in inclusive schools: Implications for administrators. *Dissertation Abstracts International, 59*(07A), 1120.

Fuchs, L. S., Fuchs, D. (1994). Inclusive schools movement and the radicalization of special education reform. *Exceptional Children, 60,* 294-309.

Fuchs, L. S., & Fuchs, D. (1998). General educators' instructional adaptations for students with learning disabilities. *Learning Disability Quarterly, 21*, 23-33.

Fuchs, L. S., Fuchs, D., & Bishop, N. (1992). Instructional adaptations for students at risk. *Journal of Educational Research, 86*, 70-83.

Fullan, M. (2001). *Leading in a culture of change.* San Francisco: Jossey-Bass.

Gajira, M., Jitendra, A. K., Sood, S., & Sacks, G. (2007). Improving comprehension of expository text in students with LD: A research synthesis. *Journal of Learning Disabilities, 40*(3), 210-225.

Gall, M. D., Borg, W. R., & Gall, J. P. (1996). *Educational research; An introduction* (6th ed.). White Plains, NY: Longman.

Geary, D. C. (1993). Mathematics disabilities: Cognitive, neropsychological, and genetic components. *Psychological Bulletin, 114,* 345-362.

Gelzheiser, L. M., & Meyers, J. (1991). Reading instruction by classroom, remedial, and resource room teachers. *The Journal of Special Education, 24*(4), 512-527.

Gersten, R. (1998). Recent advances in instructional research for students with learning disabilities: An overview. *Learning Disabilities Research and Practice, 13*, 162-170.

Gersten, R., & Baker, S. (2001). Teaching expressive writing to students with learning disabilities: A meta-analysis. *Elementary School Journal, 101*(3), 251-272.

Gersten, R., Carnine, D. W., & White, W. A. (1984). The pursuit of clarity: Direct instruction and applied behavior analysis. In W. Heward, T. E. Heron, D. S Hill, & J. Trap-Porter (Eds.), *Focus on behavior analysis in education* (pp. 38-57). Columbus, OH: Charles Merrill.

Gersten, R., Keating, T., Yovanoff, P., & Harniss, M. K. (2001). Working in special education: Factors that enhance special educators' intent to stay. *Exceptional Children*, *67*, 549-553.

Gersten, R., & Vaughn, S. (2001). Meta-analyses in learning disabilities: Introduction to the special issue. *The Elementary School Journal, 101*(3), 247-249.

Gersten, R., Vaughn, S., Deshler, D., & Schiller, E. (1997). What we know about using research findings: Implications for improving special education practice. *Journal of Learning Disabilities*, *30*(5), 466-476.

Gersten, R., Williams, J., Fuchs, L., & Baker, S. (1998). Improving reading comprehension for children with disabilities: A review of the research *(Final Report: Section 1, U. S. Department of Education Contract HS 921700).*

Glaser, R. (1977). *Adaptive education: Individual diversity and learning.* New York: Holt, Rinehart & Winston.

Glickman, C. D., Gordon, S. P., & Ross-Gordon, J. M. (2001). *Supervision and instructional leadership: A developmental approach* (5th ed.) Needham Heights, MA: Allyn & Bacon.

Gresham, F. M. (2002). Response to treatment. In R. Bradley, L. Danielson, & D. Hallahan (Eds.), *Identification of learning disabilities: Research to practice* (pp. 467-519). Mahwah, NJ: Erlbaum.

Guzman, N. (1996). Leadership for successful inclusive schools. *Journal of Educational Administration, 35*(5), 439-450.

Hallinger, P. (1992). The evolving role of American principals: From managerial to instructional and transformational leadership. *Cambridge Journal of Education, 33(*3), 329-351.

Hallinger, P. (2003). Leading educational change: Reflections on the practice of instructional and transformational leadership. *Cambridge Journal of Education, 33*(3), 329-351.

Hallinger, P., Bickman, L., & Davis, K. (1996). School context, principal leadership, and student reading achievement. *The Elementary School Journal, 96*(5), 527-549.

Hallinger, P., & Heck (1996). Reassessing the principal's role in school effectiveness: A review of empirical research, 1980-1995. *Educational Administration Quarterly, 32*(1), 5-44.

Hallinger, P., & McCary, C. E. (1990). Developing the strategies thinking of instructional leaders. *The Elementary School Journal, 91*(2), 89-108.

Hallinger, P., & Murphy, J. (1987). Assessing and developing principal instructional leadership. *Educational Leadership, 45*(1), 54-61.

Hammill, D. D. (1993). A brief look at the learning disabilities movement in the United States. *Journal of Learning Disabilities, 26(*5), 295-310.

Hammill, D. D., & Larsen, S. C. (1974). The effectiveness of psycholinguistic training. *Exceptional Children, 41*, 5-14.

Harris, K. R., & Pressley, M. (1991). The nature of cognitive strategy instruction: Interactive strategy construction. *Exceptional Children, 57*, 392-404.

Haynes, M. C., & Jenkins, J. R. (1986). Reading instruction in special education resource rooms. *American Educational Research Journal, 23*(2), 161-190.

Individuals with Disabilities Education Act, Pub. L. No. 108-446, 118 Stat. 2647 (2004).

Kameenui, E. J., Jitendra, A. K., & Darch, C. B. (1995). Direct instruction reading as contronym and eonomine. *Reading and Writing Quarterly: Overcoming Learning Difficulties, 11*(1), 3-17.

Kauffman, J. M. (1996). Eight myths about special education. *Focus on Exceptional Children, 28*(5), 1-12.

Kavale, K. A. & Forness, S. R. (1987). Substance over style: Assessing the efficacy of modality testing and teaching. *Exceptional Children, 54,* 228-239.

Kavale, K. A. & Forness, S. R. (2000). *Policy decisions in special education: The role of the meta-analysis*. In R. Gersten, E. Schiller, & S. Vaughn (Eds.), Contemporary special education research: Syntheses of the knowledge base on critical instructional issues (pp. 281-326). Mahwah, NJ: Erlbaum.

Kaye, E. K. (Ed.). (2002). *Requirements for certification of teachers, counselors, librarians, administrators for elementary and secondary schools: Sixty seventh edition*. Chicago: University of Chicago Press.

Kirk, S. A., & Kirk, W. D. (1971). *Psycholinguistic learning disabilities: Diagnosis and remediation.* Urbana: University of Illinois.

Klingner, J. K., Arguelles, M. E., Hughes, M. T., & Vaughn, S. (2001). Examining the school-wide "spread" of research-based practices. *Learning Disability Quarterly, 24*, 221-234.

Kvale, S. (1996). *Interviews: An introduction to qualitative interviewing.* Thousand Oaks, CA: Sage.

Lambert, L. (2002). A framework for shared leadership. *Educational Leadership, 59*(8), 37-40.

Lasky, B., & Karge, B. D. (2006). Meeting the needs of students with disabilities: Experience and confidence of principals. *NASSP, 90*(1), 19-36.

Leithwood, K., & Jantzi, D. (2000). The effects of transformational leadership on organizational conditions and student engagement with school. *Journal of Educational Administration, 38*(2), 112-129.

Leithwood, K., Jantzi, D., & Steinbach, R. (1999). *Changing leadership for changing times*. Buckingham, UK: Open University Press.

Leithwood, K., Louis, K. S., Anderson, S., & Wahlstrom, K. (2004). *How leadership influences student learning.* Minneapolis, MN: Center for Applied Research and Educational Improvement; Toronto: Ontario Institute for Studies in Education at the University of Toronto.

Levin, J. R. (1986). Four cognitive principles of learning strategy instruction. *Educational Psychologist, 21*, 3-17.

Leyser, Y., & Tappendorf, K. (2001). Are attitudes and practices regarding mainstreaming changing? A case of teachers in two rural school districts. *Education, 121,* 751-760.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry.* Thousand Oaks, CA: Sage.

Lyons, C. A., Schumacher, J. A., & Cameron, G. (2008). From knowledge to wisdom : Using case methodology to develop effective leaders. *McRel Insights.* Mid-Continent Research for Education and Learning. Denver, CO.

Maccini, P., & Gagnon, J. C. (2006). Mathematics instructional practices and assessment accommodations by secondary special and general educators. *Exceptional Children, 72*, 217-234.

Marks, H. M., & Printy, S. M. (2003). Principal leadership and school performance: An integration of transformational and instructional leadership. *Educational Administration Quarterly, 39*(3), 370-397.

Mastropieri, M. A., Scruggs, T. E., Bakken, J. P., & Whedon, C. (1996). Reading comprehension: A synthesis of research in learning disabilities. In T. E. Scruggs & M. A. Mastropieri (Eds.), *Advances in learning and behavioral disabilities* (pp. 201-227). Greenwich, CT: JAI Press.

Mathes, P. G., & Fuchs, L. S. (1994). The efficacy of peer tutoring in reading for students with mild disabilities: A best evidence synthesis. *School Psychology Review, 23*, 59-80.

McIntosh, R., Vaughn, S., Schumm, J. S., Haager, D., & Lee, O. (1993). Observations of students with learning disabilities in general education classrooms. *Exceptional Children, 60*, 249-261.

McColl-Kennedy, J. R., & Anderson, R. D. (2002). Impact of leadership style and emotions on subordinate performance. *The Leadership Quarterly, 13*(5), 549-559.

McGill-Franzen, A., & Allington, R. L. (1990). Comprehension and coherence: Neglected elements of literacy instruction in remedial and resource room services. Journal of Reading, Writing, and Learning Disabilities International, 6(2), 149-182.

McIntyre, C. W., & Pickering, J. S. (1995). *Clinical studies of multisensory structured language education for students with dyslexia and related disorders*. Salem, OR: The International Multisensory Structured Language Education Council.

McLaughlin, M. W. (1991). The RAND change agent study: Ten years later. In A. R. Oden (Ed.), *Education Policy implementation* (pp. 143-155). Albany: State University of New York Press.

McLaughlin, M. W., & Nolet, V. (2004). *What every principal needs to know about special education.* Thousand Oaks, CA: Corwin Press.

McLeskey, J., & Waldron, N. L. (2002). Inclusion and school change: Perceptions regarding curricular and instructional adaptations. *Teacher Education and Special Education, 25,* 41-54.

Meek, J. P. (2000). Relationship between principal instructional leadership and student achievement outcomes in North Carolina public elementary schools. *Dissertation Abstracts International, 61*(3), 837A. (UMI No. 9964372).

Miles, M. B., & Huberman, M. A. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage.

Minke, K. M., Bear, G. G., Deemer, S. A., & Griffin, S. M. (1996). Teachers' experiences with inclusive classrooms: Implications for special education reform. *The Journal of Special Education, 30*, 152-186.

Monteith, D. S. (2000). Professional development for administrators in special education: Evaluation of a program for underrepresented personnel. *Teacher Education and Special Education, 23*, 281-289.

Moody, S. W., Vaughn, S., Fisher, T., & Hughes, M. (2000). Reading instruction in the resource room: Set up for failure. *Exceptional Children, 66*(3), 305-316.

National Assessment of Educational Progress (NAEP) (2007). *The Nation's Report Card: Reading 2007*. Washington, DC: U.S. Department of Education, National Center for Educational Statistics.

National Association of Elementary School Principals [NAESP] (2001a). *Essentials for principals: School leader's guide to special education*. Alexandria, VA: Author.

NAESP. (2001b). *Leading learning communities: NAESP standards for what principals should know and be able to do*. Alexandria, VA: Author.

National Center for Education Statistics (NCES) (2005). Institute of Education Sciences. U.S. Department of Education. *Fast facts for students with disabilities*. Retrieved January 4, 2008 from NCES web site: http://nces.ed.gov/fastfacts/display.asp?id=59

No Child Left Behind, 42 U.S.C. 9401 (2002).

Office of Special Education and Rehabilitation Services. (2004). *IDEA '04: The Individuals With Disabilities Education Act Amendments of 2004.* Washington, DC: U.S. Department of Education. Retrieved December 9, 2006 from http://www.ed.gov/offices/OSERS/IDEA/index.html

Ovando, M. N. (2005). *Building instructional leaders capacity to deliver constructive feedback to teachers*. Journal of Personnel Evaluation in Education *18*(4)171-183.

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.

Praisner, C. (2003). Attitudes of elementary school principals toward the inclusion of students with disabilities. *Exceptional Children, 69*(2), 135-145.

President's Commission on Excellence in Special Education. (2002). *A new era: Revitalizing special education for children and families.* Washington, DC: U.S. Department of Education.

Pressley, M., & Ghatala, E. S. (1990). Self-regulated learning: Monitoring learning from text. *Educational Psychologist, 25*, 19-34.

Pugach, M. C., & Warger, C. L. (2001). Curriculum matters: Raising expectations for students with disabilities. *Remedial and Special Education, 22*(4), 194-196.

Quinn, D. M. (2002). The impact of principal leadership behaviors on instructional practice and student engagement. *Journal of Educational Administration, 40*(5), 447-467.

Reitzug, U. C. (1994). A case study of empowering principal behavior. *American Educational Research Journal, 31*(2), 283-307.

Rosenshine, B. (1995). Advances in research on instruction. *The Journal of Educational Research, 88*(5), 262-268.

Rosenshine, B., & Stevens, R. (1986). Teaching functions. In M. C. Wittrock (Ed), *Handbook of Research on Teaching* (3rd Ed.) (pp. 328-375). New York: MacMillan.

Saddler, B., Moran, S., Graham, S., & Harris, K. R. (2004). Preventing writing difficulties: The effects of planning strategy instruction on the writing performance of struggling writers. *Exceptionality, 1*, 3-17.

Sage, D., & Burrello, L. (1994). *Leadership in educational reform: An administrator's guide to changes in special education*. Baltimore: Brookes.

Schumm, J. S., & Vaughn, S. (1991). Making adaptations for mainstreamed students: General classroom teachers' perspectives. *Remedial and Special Education, 12*, 18-25.

Schumm, J. S., & Vaughn, S. (1992). Planning for mainstreamed special education students: Perceptions of general classroom teachers. *Exceptionality, 3,* 81-90.

Schumm, J. S., & Vaughn, S. (1995). Getting ready for inclusion: Is the stage set? *Learning Disabilities Research and Practice, 10,* 169-179.

Schumm, J. S., & Vaughn, S., Gordon, J., & Rothlein, L. (1994). General education teachers' beliefs, skills and practices planning for mainstreamed students with learning disabilities. *Teacher Education and Special Education, 27*, 22-37.

Schumm, J. S., & Vaughn, S., Haager, D., McDowell, J., Rothlein, L., & Saumell, L. (1995) Teacher planning for individual needs: What can mainstreamed special education students expect? *Exceptional Children, 61*(4), 335-352.

Scott, B., Vitale, M., & Masten, W. G. (1998). Implementing instructional adaptations for students with disabilities in inclusive classrooms. *Remedial and Special Education, 19*, 106-119.

Scruggs, T. E., & Mastropieri, M. A. (1996). Teacher perceptions of mainstreaming/inclusion, 1958-1995: A research synthesis. *Exceptional Children*, *63*, 59-74.

Sergiovanni, T. J. (1995). *The principalship: A reflective practice perspective*. Needham Heights, MA: Allyn & Bacon.

Sergiovanni, T. J. (1998). Leadership as pedagogy, capital development, and school effectiveness. *International Journal of Leadership in Education, 1*(1), 37-46.

Sergiovanni, T. J., & Starratt, R. J. (2007). *Supervision: A redefinition* (8th ed.). New York, NY: McGraw-Hill.

Severance, L. A. (1997). Critical tasks for job effectiveness for special education administrators: A dephi studies forecast. *Dissertation Abstracts International, 58*, 4148.

Sheppard, B. (1996). Exploring the transformational nature of instructional leadership. *The Alberta Journal of Educational Research, 42*(4), 325-344.

Slavin, R. E. (1987). Grouping for instruction in the elementary school. *Educational Psychologist, 22*, 109-127.

Snow, C. E., Burns, M. S., & Griffin, P. (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.

Stein, M. K., & Nelson, B. S. (2003). Leadership content knowledge. *Educational Evaluation and Policy Analysis 25*(4), 423-448.

Strauss, A. L., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Thousand Oaks, CA: Sage.

Swanson, H. L. (1999). Reading research for students with LD: A meta-analysis of intervention outcomes. *Journal of Learning Disabilities, 32*, 504-532.

Swanson, H. L., Hoskyn, M., & Lee, C. (1999). *Interventions for students with learning* disabilities: A meta-analysis of treatment outcomes. New York: Guilford.

Taylor, M. B., & Wiliams, J. P. (1983). Comprehension on learning-disabled readers: Task and text variations. *Journal of Educational Psychology, 75*, 743-751.

Troia, G., Graham, S., & Harris, K. R. (1999). Teaching students with learning disabilities to mindfully plan when writing. *Exceptional Children, 65*, 235-252.

van Hover, S. D., & Yeagar, E. A. (2003). Secondary history teachers and inclusion of students with disabilities: An exploratory study. *Journal of Social Studies Research*, *27*, 36-45.

Vaughn, S., Gersten, R., & Chard, D. J. (2000). The underlying message in LD intervention research: Findings from research syntheses. *Exceptional Children*, *67,* 99-112.

Vaughn, S., Levy, S., Coleman, M., & Bos, C. S. (2002). Reading instruction for students with LD and EBD: A synthesis of observational studies. *The Journal of Special Education, 36*(1), 2-13.

Vaughn, S., & Linan-Thompson, S. (2003). What is special about special education for students with learning disabilities? *The Journal of Special Education, 37,* 140-147.

Vaughn, S., Linan-Thompson, S., & Hickman, P. (2003). Response to treatment as a means of identifying students with reading/learning disabilities. *Exceptional Children, 69*, 391-409.

Vaughn, S., Moody, S. W., & Schumm, J. S. (1998). Broken promises: Reading instruction in the resource room. *Exceptional Children, 64*(2), 211-225.

Vaughn, S., Reiss, M., Rothlein, L., & Hughes, M. T. (1999). Kindergarten teachers' perceptions of instructing students with disabilities. *Remedial and Special Education*, *20*, 184-191.

Vaughn, S., Schumm, J. S., & Kouzekanani, K. (1993). What do students with learning disabilities think when their general education teachers make adaptations? *Journal of Learning disabilities, 26*, 545-555.

Vaughn, S., & Schumm, J. S. (1994). Middle school teachers' planning for students with learning disabilities. *Remedial and Special Education, 15*, 152-161.

Vaughn, S., & Schumm, J. S. (1995). Responsible inclusion for students with learning disabilities. *Journal of Learning Disabilities, 28*, 264-270, 290.

Vaughn, S., & Schumm, J. S. (1996). Classroom ecologies: Classroom interactions and implications for inclusion of students with learning disabilities. In D. L. Speece & B. K. Keogh (Eds*.), Research on classroom ecologies: Implications for inclusion of children with learning disabilities* (pp. 107-124). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Villa, R. A., Thousand, J. S., Meyers, H., & Nevin, A. (1996). Teacher and administrator perceptions of heterogenous education. *Exceptional Children, 36*(1), 29-45.

Wakeman, S. Y., Browder, D. M., Flowers, C., & Ahlgrim-Delzell, L. (2006). Principals' knowledge of fudamental and current issues in special education. *NASSP Bulletin, 90*(2), 153-174.

White, D. M. (1993). Elementary principals in the administration of integrated special education programs. *Dissertation Abstracts International, 54*(03A), 0772.

Will, M. C. (1986) Educating children with learning problems: A shared responsibility. *Exceptional Children*, *52*, 411-416.

Williams, J. P. (2000). Foreword. In R. Gersten, E. Schiller, & S. Vaughn (Eds.), *Contemporary special education research: Syntheses of the knowledge base on critical instructional issues* (pp. vii-viii). Mahwah, NJ: Erlbaum.

Witzers, B., Bosker, R. J., & Kruger, M. L. (2003). Educational leadership and student achievement: The elusive search for an association. *Educational Administration Quarterly, 39*(3), 398-424.

Yin, R. K. (2003). *Case study research: Design and methods*. Thousand Oaks, CA: Sage.

Ysseldyke, J. E., Christenson, S. L., Thurlow, M. L., & Bakewell, D. (1989). Are different kinds of instructional tasks used by different categories of students in different settings? *School Psychology Review, 18*(1), 98-111.

Ysseldyke, J. E., Thurlow, M. L., Christenson, S. L., & Weiss, J. (1987). Time allocated to instruction of mentally retarded, learning disabled, emotionally disturbed, and nonhandicapped elementary students. *The Journal of Special Education, 21*(3), 43-55.

Ysseldyke, J. E., Thurlow, M. L., Wotruba, J. W., & Nania, P. A. (1990). Instructional arrangements: Perceptions from general education. *Teaching Exceptional Children, 22*, 4-6.

Zigmond, N. & Baker, J. M. (1994). Is the mainstream a more appropriate educational setting for Randy? A case study of one student with learning disabilities. *Learning Disabilities Research & Practice, 9*, 108-117.

# Vita

Jennifer Meyer Heckert was born in Long Beach, California on October 20, 1966, the daughter of Lairy J. and S. Corinne Meyer. After completing her work at Millikan High School in Long Beach, California, in 1984, she entered San Diego State University in San Diego, California. She received the degree of Bachelor of Arts in May 1988. During the following years she was employed as an English instructor in Japan and an adult literacy instructor in Long Beach, California. She received the Master of Arts degree in linguistics from California State University Long Beach in May 1996. She was then employed as a primary general education teacher as well as a special education team leader in Long Beach, California. In 2004, Jennifer entered the doctoral program in special education at the University of Texas. She was employed as a Research Associate at The Vaughn Gross Center for Reading and Language Arts as well as an assistant instructor and university facilitator in the Special Education Department at The University of Texas at Austin.

Permanent Address: 3349 Ladoga Avenue

Long Beach, California 90808

This dissertation was typed by the author.